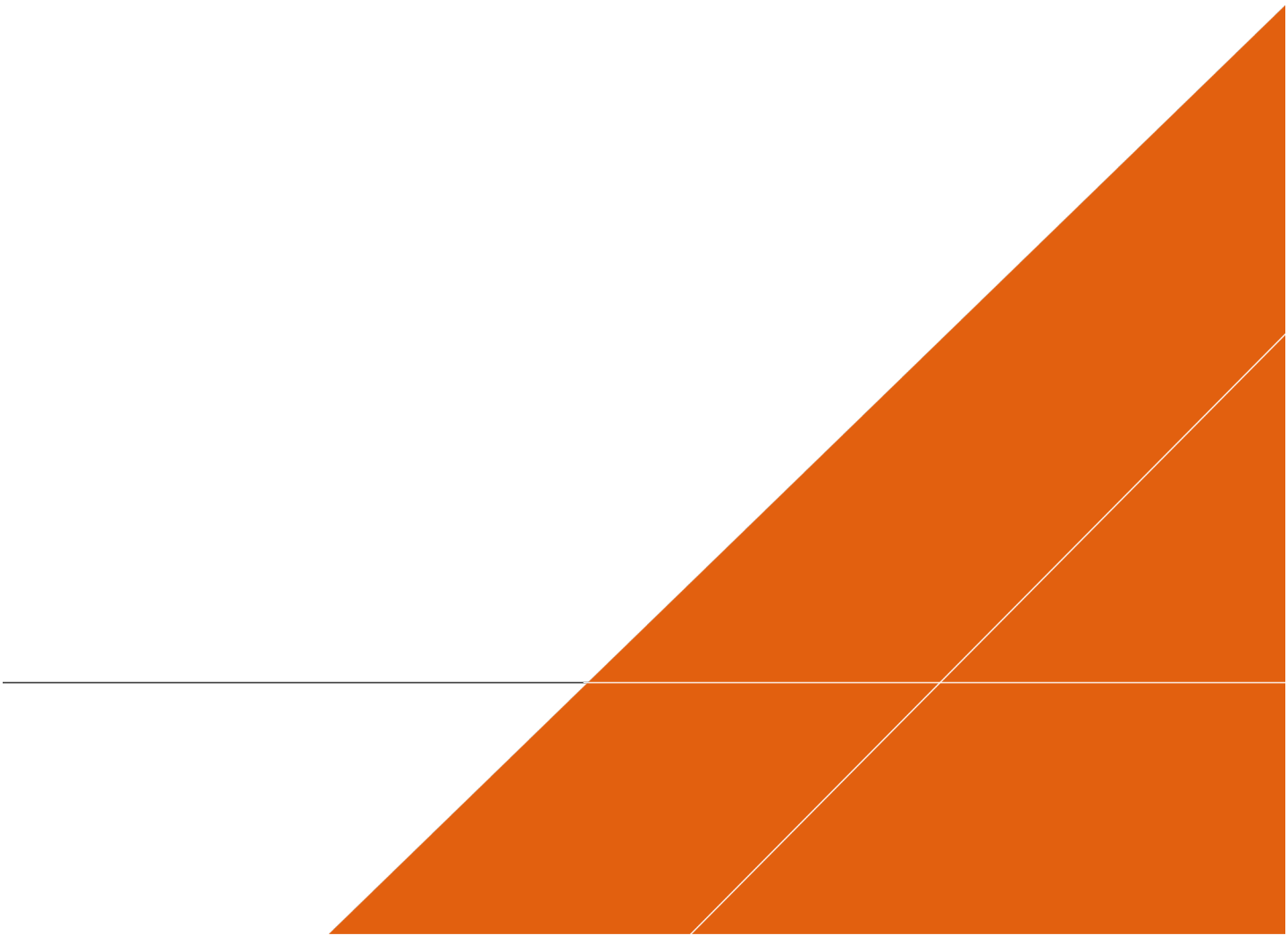
ARCADIS Design & Consultancy for natural and built assets

NOISE MANAGEMENT PLAN

23-43 & 45 Tattersall Road, Kings Park

12 SEPTEMBER 2019



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SELL AND PARKER KINGS PARK METAL RECOVERY, PROCESSING AND RECYCLING FACILITY

Noise Management Plan

Construction and Operation

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REVISIONS

Rev. No	Rev. Date	Revision Description	Prepared by	Approved By	Signed
A	February 2017	New document	MH	CM	MH
B	July 2017	Revised Site Layout	MH	CM	MH
C	October 2017	Revised Site Layout – LEC S96	MH	CM	MH
D	March 2018	Revised Site Layout	MH	CM	MH
E	September 2019	Changes associated with Mod 3	FM, SF	HR	HR

CONTENTS

APPENDICES

GLOSSARY

Term	Definition
Arcadis	Arcadis Australia Pacific Pty Ltd
BCC	Blacktown City Council
BEMS	Blacktown Environment Management System
CEMP	Construction Environmental Management Plan
DA	Development Application
dB	Decibel
DPIE	Department of Planning, Industry and Environment (from 1 July 2019)
DP&E	(Former) Department of Planning and Environment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EP&A Act	*Environmental Planning & Assessment Act 1979*
EPA	Environmental Protection Authority
EPL	Environment Protection Licence
ERM	Environmental Resources Management
The Facility	The Kings Park Metal Recovery, Processing and Recycling Facility
GEM	Group Environmental Manager
GHRM	Group Human Resources Manager
GSM	Group Safety Manager
HP	Higgins Planning
LAeq	Level Average Equivalent
LEC	Land and Environment Court
Lmax	Level Maximum
LMP	Landscape Management Plan
MOD	Modification
MOD 1	The approved modifications to The Original Approval dated 6 July 2017
MOD 2	The approved modifications to The Original Approval and approved MOD 1 dated 26 February 2018

Term	Definition
MOD 3	The approved modifications to The Original Approval and approved MOD 3 dated 29 May 2019
NMP	Noise Management Plan
NVIA	Noise and Vibration Impact Assessment
OEMP	Operational Environmental Management Plan
The Original Approval	The approved Environmental Impact Assessment for SSD 5041 dated 12 November 2015
PIRMP	Pollution Incident Response Management Plan
POEO Act	*Protection of the Environment Operations Act 1997*
The Project	The approved activities under SSD 5041 and MODs 1 - 3
Renzo Tonin	Renzo Tonin & Associates
Sell & Parker	Sell and Parker Pty Ltd
The Site	The Sell & Parker Premises at 23-43 and 45 Tattersall Road, Kings Park NSW
SSD	State Significant Development

1 INTRODUCTION

1.1 Background

This Noise Management Plan (NMP) has been prepared by Higgins Planning (HP) and updated by Arcadis Australia Pacific Pty Ltd (Arcadis) in collaboration with Sell and Parker Pty Ltd (Sell & Parker) for the Kings Park Metal Recovery, Processing and Recycling Facility (the Facility) at 23-43 and 45 Tattersall Road, Kings Park (the Site).

The Facility has been approved by the Department of Environment, Planning and Industry (DPIE) (formerly DP&E) under the State Significant Development (SSD) application No. 5041 dated 12 November 2015 (the Original Approval), including three associated modifications (the Project).

1.2 Purpose of this Noise Management Plan

This NMP has been prepared in response to Conditions A2 and B29 of the Project.

In particular, this NMP:

- Describes the noise management of the Project, including activities to be undertaken and relative timing
- Provides specific mitigation measures and controls that can be applied on-site to avoid or minimise negative environmental impacts
- Provides specific mechanisms for compliance with applicable policies, approvals, licences, permits, consultation agreements and legislation
- Describes the noise management related roles and responsibilities of personnel
- States objectives and targets for issues which are important to the environmental performance of the Project
- Outlines a monitoring regime to check the adequacy of controls.

The purpose of this NMP is to provide detail on how Sell & Parker will manage potential noise impacts from construction and operation of the Site.

This NMP details the noise management procedures which also form part of the Operational Environment Management Plan (OEMP).

The structure of this NMP is based on the DPIE's (formerly Department of Infrastructure Planning and Natural Resources) "Guideline for the Preparation of Environmental Management Plans" (2004), as well as the requirements of the Environmental Impact Statement (EIS) and supporting documents. The plan also considers the requirements of DPIE's Environmental Management plan, Post Approval Guidelines (2018).

This NMP has been prepared based on information from the Noise & Vibration Impact Assessments prepared by Renzo Tonin (refer to copies at Appendix H), which forms part of Condition A2 in Schedule 2, Part A of the Original Approval and MODs 1 – 3, which state:

TERMS OF CONSENT

A2. The Applicant shall carry out the Development in accordance with the:

a) EIS prepared by ERM dated July 2014;

b) Response to Submissions report prepared by ERM dated 7 January 2015;

c) *Supplementary Response to Submissions prepared by Mecone dated 30 June 2015;*

d) *Supplementary Response to Submissions prepared by Sell & Parker Pty Ltd dated 3 September 2015;*

e) *Site layout plans and drawings (See Appendix A);*

f) *Management and Mitigation Measures (see Appendix B);*

g) *Modification Application SSD 5041 MOD 1 and accompanying document titled Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park dated August 2016 prepared by Higgins Planning, additional information from Higgins Planning dated 22 December 2016, further additional information from Allens and Linklaters dated 9 February 2017 and the Town Planning Report prepared by Ethos Consulting on 29 September 2017;*

h) *Modification SSD 5041 MOD 2 and accompanying document titled Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park dated December 2017 prepared by Higgins Planning; and*

i) *Modification Application SSD 5041 MOD 3 and accompanying document titled Section 4.55(1A) Application (SSD 5041 – Mod 3), 23-43 and 45 Tattersall Road, Kings Park dated 11 February 2019 and Response to Submissions dated 4 April 2019 prepared by Arcadis Australia Pacific Pty Ltd.*

In addition, Sell & Parker have had consultation meetings and discussions with both the Environment Protection Authority (EPA) and DPIE as required to assist with the preparation of this NMP.

1.3 Site Location and Context

The Site is located in the mid-block of Tattersall Road, Kings Park and approximately 2.5 kilometres from the M7. This location is depicted in Figure 1. Kings Park is located within the Local Government Area (LGA) of Blacktown City Council (BCC), and is located approximately 41.2 kilometres from the Sydney Central Business District (CBD).

Figure 1 Site location

1.4 Site Description

The Site is located on the southern side of Tattersall Road, Kings Park (see Figure 1). The Site has a legal description of Lot 2 in DP 550522 and Lot 5 in DP 7086. The Site is significantly lower than the level of Tattersall Road to the north and is relatively flat/level with a fall towards its rear boundary. The Site is largely cleared, with the exception of some trees and screening plants scattered across the perimeter front and rear boundaries.

The existing Facility is screened by mature trees along the Tattersall Road frontage of the land between the property boundary and the existing acoustic wall along the frontage of the portion of the site at 45 Tattersall Road. An open storm water drainage channel, Waller Creek, runs along the eastern boundary. Adjacent to the Site's southern boundary is Breakfast Creek.

1.5 Existing Environment and Sensitive Receptors

The Facility is primarily surrounded by commercial and industrial land uses within a 500 metre radius. The exception to this is where residential land uses back on to Sunnyholt Road around 350 metres to the east of the site.

Detailed information can be found in the Renzo Tonin & Associates (Renzo Tonin) supplementary Noise and Vibration Impact Assessment (NVIA) dated 3 September 2015 at Appendix H.

The nearest watercourse is located along the rear or southern boundary of the Site, known as Breakfast Creek. This is a modified urban waterway that flows through the industrial estate from east to west (refer to Figure 2 below).

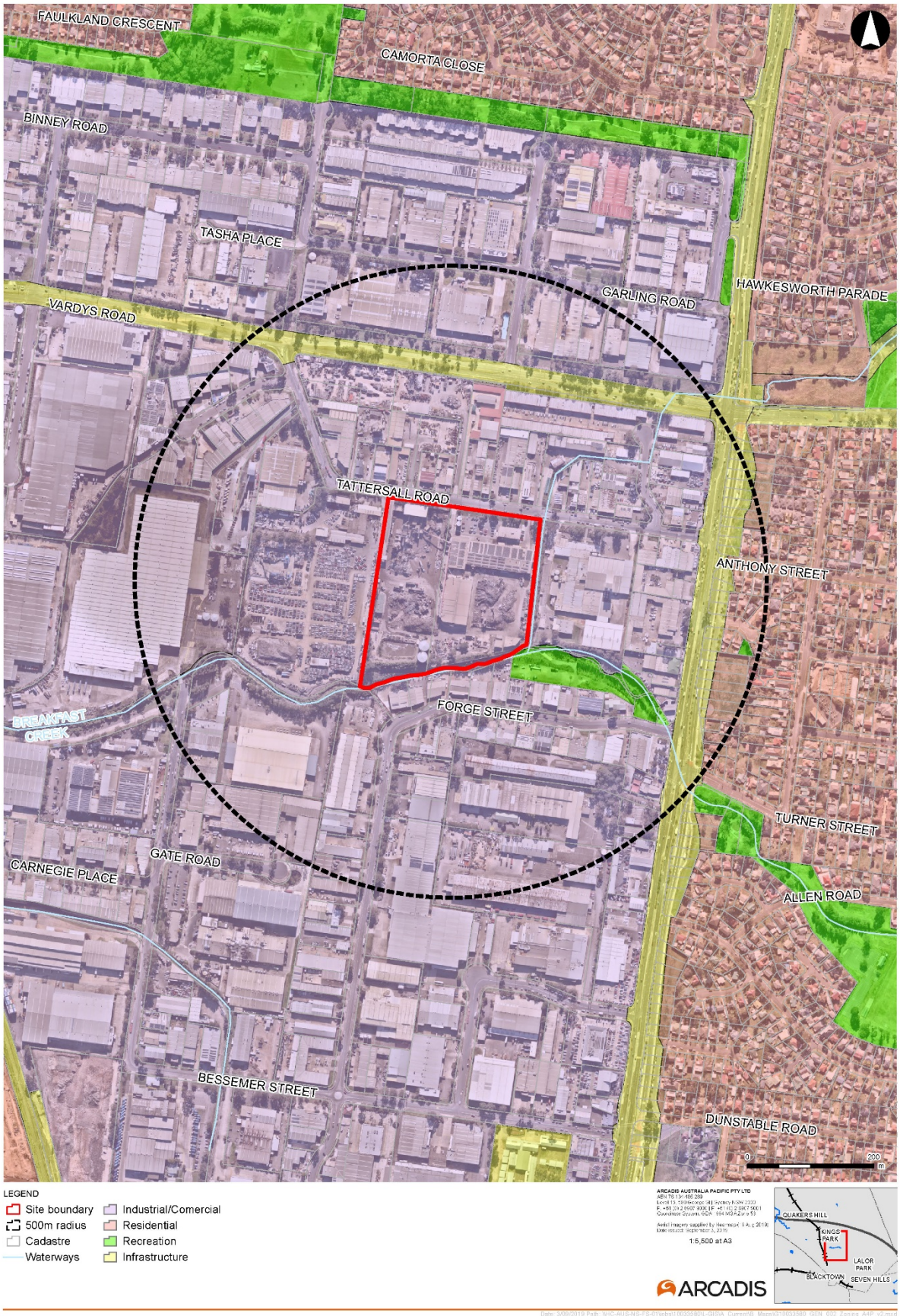


Figure 2 Nearby sensitive receptors

For information on mitigation measures, monitoring, controls and exceedance management measures refer to Sections 6, 7, 8 and 9 of this NMP.

1.6 Scope

The Scope of this NMP includes:

- An overview of the potential environmental impacts of the Facility
- A description the management measures to protect the environment
- An overview of the Site operations (refer to the Site Layout Plan in Appendix A)
- Guidance on compliance with the relevant environmental legislation including the EPA Licence (copy at Appendix G) and Original Approval (copy at Appendix C)
- Provision of appropriate mitigation measures for the key environmental issues
- Definitions of the roles and responsibilities of the operational team
- The basis for monitoring, reporting and maintaining compliance with regulatory requirements.

1.7 Environmental Management System Context

Figure 3 below describes the structure of the Environment Management System (EMS) for the Facility and how it relates to this NMP.

Figure 3 Structure of the EMS for the Facility

The EMS establishes management responses and frameworks for each management plan and its implementation at the Facility. The EMS sets the evaluation criteria which will ensure systems and processes are continually reviewed for continuous improvement at the Site.

1.8 NMP Objectives and Outcomes

Table 1 below outlines the key objectives of this NMP:

Table 1: NMP Objectives and Outcomes

Objectives	Outcome
To ensure compliance with all applicable regulatory conditions for the facility	Compliance is achieved, maintained and verified through independent auditing.

Objectives	Outcome
To minimise non-compliances	Improved environmental protection.
Implementation of agreed noise quality management mitigation measures for the life of the consent	All agreed noise management and mitigation measures are implemented and maintained.
To implement baseline noise quality studies	Create a standard to which variations over time can be measured against.
To use technology when it becomes available to ensure ongoing improvement and environmental protection	Continuous improvement so compliance is met now and into the future.

1.9 Environmental Policy

Sell & Parker are committed to operating within the principles of continuous improvement and reducing the sites environmental footprint. This is outlined in the Sell & Parker Environment Policy, a copy of which is included at **Appendix B** and available on the Sell & Parker website, www.sellparker.com.au under 'About Us', 'Links' and 'Environmental Reports'. All employees and contractors undergo an induction which includes familiarisation with the requirements of the Environment Policy.

Sell & Parker is committed to operating to the principles of continuous improvement and reducing the Site's environmental footprint. This is outlined in the Sell & Parker Environment Policy, a copy of which is included at **Appendix B** and available on the Sell & Parker website, www.sellparker.com.au under 'About Us', 'Links' and 'Environmental Reports'. All employees and contractors undergo an induction which includes familiarisation with the requirements of the Environment Policy.

The key aspects of the Sell & Parker Environment Policy are:

- Ensure all employees, contractors and associates have an understanding of this Policy, the Environment Management System (EMS), Stormwater Management Plan and Safe Working Procedures
- Ensure all operations are undertaken in an environmentally responsible manner and in accordance with the relevant environmental legislation, regulations, statutory obligations and relevant voluntary codes of practice
- Measure, monitor and report on environmental initiatives
- Regularly review our business operations to identify and implement opportunities for improvement
- Record, investigate and implement the appropriate corrective action for all environment incidents
- Periodically review and revise this Policy and Safe Working Procedures to maintain their relevance.

Sell & Parker is committed to complying with all of its legal obligations. Compliance to applicable regulatory requirements in regard to the operations at the Facility will be achieved through:

- Identifying and assessing statutory requirements that are directly applicable
- Consulting with relevant government bodies and agencies

- Internally communicating relevant statutory requirements
- Providing relevant training
- Monitoring and reviewing internally and via third parties the Sell & Parker environmental management system
- Inspections by the Site, Group Safety and Group Environment Managers
- Updating EMP's where required should legislation change.

2 LEGAL AND CONSENT REQUIREMENTS

This section details the legislative requirements that relate to the site in terms of noise management.

2.1 Legislation

Legislation relevant to construction management:

- *Protection of the Environment Operations Act 1997*
- *Protection of the Environment Operations (Noise Control) Regulation 2017*.

2.2 Consent Conditions

Table 2 below details the NMP in accordance with Condition B29 in the Original Approval. and where in this document each component has been addressed:

Table 2: NMP Condition B29 summary and document reference

Consent Condition	Document Reference
***B29.** Prior to the commencement of construction of the Development, the Applicant shall prepare a Noise Management Plan to the satisfaction of the Secretary. The plan must:*	
a) be prepared by a suitably qualified and experienced person(s) in consultation with the EPA	Sections 1.1 and 1.6
b) describe all the measure that would be implemented to ensure:	-
(i) all reasonable and feasible measures are employed to minimise noise impacts	Section 6
(ii) the installation and maintenance of appropriate physical noise barriers	Sections 6.4 & 6.5
(iii) air handling devices are designed and located to minimise noise impacts	Section 6.6
(iv) truck drivers are aware of suitable truck mitigation measures;	Section 6.11
(v) contingency measures are deployed to minimise impacts should an exceedance of the criteria occur or appear likely to occur; and	Section 6.12
(vi) compliance with the relevant conditions of this consent;	Section 2.4
c) include a Noise Monitoring Program to evaluate the performance of the Development; and	Sections 6.10 and 7
d) include a protocol to determine the occurrence of an exceedance of the criteria in this consent should such an exceedance occur.	Section 8

2.3 Consent Conditions Compliance

The Original Approval (refer **Appendix C**) and MOD 1 (refer to **Appendix F**), provide details of all DPIE requirements for the Site's development. In **Table 3** below are the specific construction management control, mitigation and monitoring requirements. The table has a document reference column indicating where the requirement is specifically addressed in the plan and/or other documentation.

Table 3: Development Consent Construction Conditions Compliance Table

Section	SSD 5041 Noise Quality Conditions	Document Reference
B24	Undertake all reasonable and feasible measures necessary to prevent explosions.	Section 7.1.3
B25	Ensure air blast overpressure level from any explosions does not exceed 120dB (Lin Peak) when measured at the premises boundary.	Sections 5.2, 7.1.3 & 7.2.1
B26	Ensure noise generated by the construction and/or operation of the development does not exceed criteria.	Sections 5, 7.1.2 & 7.1.7
B27	Noise generated is measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the latest version of the NSW Industrial Noise Policy.	Section 2.5
B28	Ensure that vibration resulting from the development doesn't exceed continuous or impulsive vibration criteria in EPA's Assessing Vibration: A technical guideline, at residential receivers.	Section 7.2.5 and refer to Renzo Tonin Acoustic Report dated 3 September 2015 at **Appendix H**
B29	Prior to commencement of construction, prepare a Noise Management Plan to the satisfaction of the Secretary.	This NMP
B29 a)	NMP to be prepared by a suitably qualified and experienced person(s) in consultation with the EPA.	Sections 1.1 and 1.6
B29 b) i)	Describe all reasonable and feasible measures employed to minimise noise impacts.	Sections 6, 7 & 8
B29 b) ii)	Describe the installation and maintenance of appropriate physical noise barriers.	Sections 6.4 & 6.5
B29 b) iii)	Describe how air handling devices are designed and located to minimise noise impacts.	Section 6.6
B29 b) iv)	Describe how truck drivers are made aware of suitable truck noise mitigation measures.	Section 6.11
B29 b) v)	Describe how contingency measures are deployed to minimise impacts should an exceedance of criteria occur or appear likely to occur.	Section 6.12
B29 b) vi)	Describe how Sell & Parker will meet compliance with the relevant conditions of this consent.	Sections 2.4, 6, 7, 8, 10 & 11
B29 c)	Include a Noise Monitoring Program to evaluate the performance of the Development.	Section 7 & 6.10
B29 d)	Include a protocol to determine the occurrence of an exceedance of the criteria in this consent, should such an exceedance occur.	Section 8
B30	Carry out the development in accordance with the	This NMP

Section	SSD 5041 Noise Quality Conditions	Document Reference
	Noise Management Plan approved by the Secretary.	
B31	Comply with the construction and operation hours.	Section 5.1 & 7.1.1
B32	Delivery of material to the site may occur at any time, if that delivery is required by police or other authorities and/or there is an on-site emergency that poses an immediate danger to personnel or equipment. In such circumstances prior notification shall be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of an emergency.	Sections 5.1 & 7.1.1
B33 a)	Implement best practice management practice, including all reasonable and feasible noise management and mitigation measures to minimise operational, low frequency and traffic noise.	Sections 6, 7.1.5 & 7.1.6
B33 b)	Minimise noise impacts during adverse meteorological conditions.	Section 7.2.4
B33 c)	Maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired.	Section 7.2.2
B33 d)	Regularly assess monitoring data and relocate, modify and/or stop operations to ensure compliance with noise criteria in this consent.	Section 7.2
C5	Ensure that the environmental management plans are prepared in accordance with relevant guidelines.	Section 2.5
C5 a)	Environment management plans have detailed baseline data.	Sections 1.5, 6.10 & 7.2.5. Refer to Baseline Data in Renzo Tonin Acoustic Report dated 3 September 2015 at Appendix H
C5 b) i)	Environment management plans have a description of relevant statutory requirements.	Section 2
C5 b) ii)	Environment management plans (EMP's) include relevant limits or performance measures.	Section 5
C5 b) iii)	EMP's include specific performance indicators that are proposed to judge the performance of the development.	Section 5
C5 b) iv)	EMP's include the measures to be implemented to comply with statutory requirements, limits, performance measures or criteria.	Section 5
C5 c) i)	Monitoring program to report on the impacts and performance of the development.	Section 7.2
C5 c) ii)	Monitoring program to report on the effectiveness of management measures.	Sections 7
C5 c) iii)	Monitoring program for contingency to manage unpredicted impacts and their consequences.	Sections 6.12 & 8

Section	SSD 5041 Noise Quality Conditions	Document Reference
C5 c) iv)	A program to investigate and implement ways to improve environmental performance of the development over time.	Sections 1.9 & 12
C5 d) i)	A protocol for managing and reporting incidents.	Section 8.0
C5 d) ii)	A protocol for managing and reporting complaints.	Section 9.0
C5 d) iii)	A protocol for managing and reporting non-compliances with statutory requirements.	Sections 8 & 10
C5 d) iv)	A protocol for managing exceedances of the impact assessment criteria and/or performance criteria.	Section 8
C5 d) v)	A protocol for periodic review of the plan.	Section 11
C7	Incident reporting.	Section 8.2
C8	Provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting requirements in any plans or programs approved in the consent.	Section 8.5
C9	Audits.	Section 10
C10	Within 3 months of commissioning the audit, submit a copy of the report to the secretary, together with responses to any recommendations contained in the audit report.	Section 10.2
C11	Annual review.	Section 11
C12	Revision of plans.	Section 10.2 & 11

2.4 Licence

The Sell & Parker Facility operates under an Environment Protection Licence (EPL) issued by the Environment Protection Authority (EPA). This EPL 11555 has been modified to reflect the Original Approval and the changed operational conditions as part of the Project.

EPL 11555 is available on the EPA website and the Sell & Parker website, www.sellparker.com.au, under links and Environmental Reports. The licence is attached in Appendix G.

2.5 Standards and Guidelines

Relevant standards, policies and guidelines for the Site's development and operation include:

- *AS 2107:2000* - Acoustics - Recommended design sound levels and reverberation times for building interiors
- *AS 2436:2010* - Guide to noise and vibration control on construction, demolition and maintenance sites
- *AS1055.1-1997* – Acoustics – Description and measurement of environmental noise – general procedures
- *AS 1269.1:2005* - Occupational noise management, Part 1: Measurement and assessment of noise immersion and exposure
- *ADR 83/00* - Vehicle standard (Australian design rule – External noise) 2005
- *Industrial Noise Policy EPA 2017*
- Interim construction noise guideline DECC 2009
- Assessing Vibration: A technical guide Feb 2006
- Guideline for the Preparation of Environmental Management Plans: Department of Infrastructure Planning and Natural Resources, 2004
- Environmental Management Plans – Post Approval Guidelines, Department of Planning and Environment, 2018
- Managing noise and preventing hearing loss at work, Code of Practice, Safe Work Australia, 2018.] 3rd Edition Canberra, June 2004.

2.6 Consultation Process

Sell & Parker is committed to meaningful stakeholder engagement and has worked in collaboration with relevant government agencies and local community to work through issues associated with site approvals and operations.

2.6.1 Internal

Discussions with directors, senior managers, key personnel and contractors have been conducted in the development of this NMP.

2.6.2 External

The following authorities have been consulted with in relation to requirements of this NMP:

- Department of Planning, Industry and Environment (DPIE) (formerly DP&E)
- Environment Protection Authority (EPA)
- Blacktown City Council (BCC).

2.6.3 Community

Feedback from the community was sought during the development application process for the Original Approval. This feedback was considered in the development of this NMP.

The process by which the community was consulted included:

- Community consultation meeting; and
- Mailbox drop.

Community feedback was made available on the DPIE's website.

Prior to the commencement of construction and during the construction process, letter box drops and informal meetings occurred with the closest neighbouring businesses along Tattersall Road.

3 ROLES AND RESPONSIBILITIES

The key positions and their environmental duties around noise management are outlined in Table 4 below.

Table 4: NMP Roles and Responsibilities

Company	Role	Responsibility
Sell & Parker	Directors	• Ensure resources and funding is available to perform required tasks • Ensure managers have required skills and training to fulfil required tasks • Ensure managers are fulfilling required monitoring and reporting tasks.
Sell & Parker	Site Manager	• Site operational activities • Daily site walks to monitor activities • Ensure all site personnel have and maintain recommended training • Ensure any non-conformances are investigated and where required reported.
Sell & Parker	Legal	• Ensure legislative updates are passed though and documents and licences are appropriately updated.
Sell & Parker	Site Supervisors	• Report any known or suspected issues.
Sell & Parker	Group Safety Manager	• Overall Site Safety • Approve any safety matters that impact site operations • Ensure there are site specific Safety Plans and Safe Work Method Statements, as required • Ensure compliance with Sell & Parker Contractor Management System.
Sell & Parker	Group Environment Manager	• Overall site environmental activities • Liaise with relevant authorities as required • Ongoing development of EMP's and revision where required

Company	Role	Responsibility
		• Review monitoring reports for compliance • Brief contractors of environmental requirements for their activities • Inspect works and where required do sampling • Ensure monitoring is taking place • Ensure reporting is taking place • Where applicable, community consultation is fulfilled.
Sell & Parker	Maintenance Manager	• Ensure all plant and mobile plant is operating to specifications.
Sell & Parker	All Personnel	• Report any known or suspected issues • Be aware of and where applicable, minimise noise in their activities.
Contractor	Site Manager	• Fulfilment of applicable Sell & Parker EMP requirements • Reporting of any known or suspected issues • Be aware of and where applicable, minimise resource usage in their activities • Follow all reasonable directions.

4 TRAINING

All on site employees and contractors will undergo site induction and training which is a combination of Sell and Parkers Learning Management System (LMS), regular toolbox talks/chats, and other on the job training. Training will vary depending on specific duties performed but will include:

- Relevant legislation
- Consent requirements
- Licence requirements
- Monitoring processes
- Mitigation measures
- Complaint process

Training programs are designed by the Group Human Resources Manager (GHRM), Group Safety Manager (GSM), Group Environment Manager (GEM) and Legal. The Site Manager is responsible for ensuring training is undertaken, as outlined in sections 4 and 7.1.6 of this NMP.

5 NOISE AND VIBRATION CRITERIA

The noise and vibration construction and operational criteria as specified in the consent includes:

5.1 Hours

Sell & Parker facility has the following operational hours as specified in Condition B31 of the Original Approval.

Table 5: Construction and Operational Hours

All Activities	
Operational Hours	
Monday to Saturday	6:00 am to 9:00pm
Sunday	Nil
Public Holidays	Nil
Cleaning and Maintenance	
Monday to Saturday	9:00 pm to 6:00 am
Sunday & Public Holidays	24 hours
Oxy-acetylene Torch Cutting	
Monday to Saturday	9:00 am to 3:00 pm
Sunday & Public Holidays	Nil
Construction Hours	
Monday to Friday	7:00 am to 6:00pm
Saturday	8:00 am to 1:00pm
Sunday	Nil
Public Holidays	Nil

As specified in condition B32, despite the above approved hours, delivery of material to the site may occur at any time, if that delivery is required by the police or other authorities; and/or there is an on-site emergency that poses an immediate danger to personnel or equipment. In such circumstances, prior notification shall be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

5.2 Noise Limits

As per Condition B26, the Sell & Parker facility has the following noise limits:

Table 6: Site Noise Limits (operation and construction)

Time	Measurement	Noise Level dB(A)
Day: 7:00am to 6:00pm	LAeq (15 minute)	46
Evening: 6:00pm to 10:00pm	LAeq (15 minute)	46
Night: 10:00pm to 6:00am	LAeq (15 minute)	38
Morning: 6:00am to 7:00am	LAeq (15 minute)	46
Morning: 6:00am to 7:00am	Lmax or LA1 (1 minute)	58

5.3 Airblast Overpressure Limits

As specified in Condition B25, the airblast overpressure level from explosions on the premises is not to exceed 120dB (Lin Peak) when measured at the boundary of the premises.

6 MITIGATION AND IMPLEMENTATION MEASURES

A number of design measures have been included in the Original Approval and subsequent modifications to ensure noise impacts from construction and operation of the Facility are minimised. These are described in this section.

6.1 Design measures

6.1.1 Traffic Management

There are weigh bridges at the entrance and exit of the Site. Separation of members of the public delivering non-ferrous materials and other vehicles delivering non-ferrous which is weighed on scales via bins or other containers. Non-ferrous operations will be moved from 45 Tattersall Road to 23 Tattersall Road where it will utilise its own driveway.

6.1.2 Physical Noise Barriers – Fencing

The following fences are located on site and have been modified to improve noise outcomes as a part of our continuous improvement goals through the Original Approval and subsequent modifications:

- Acoustic wall along the northern boundary
- Raised acoustic wall along the western boundary
- Acoustic wall along the driveway entry
- 8 metre acoustic fence on the eastern boundary converted from a 2.4 metre cyclone fence.
- 4 metre colorbond fence on the southern boundary of 23 Tattersall Road converted from a 2.4 metre cyclone fence.

6.1.3 Trommel Screen

Installation of a semi enclosed (roof, front, rear and side walls) shed around the existing free standing separator which will reduce noise emissions.

6.1.4 Shear

Installation of a larger shear on the 23 Tattersall Road site. This modern shear is designed and built to meet improved noise standards.

6.2 Implementation measures

6.2.1 Maintenance

Equipment

All plant and equipment installed and used on site will be maintained and operated in a proper and efficient condition. It will be maintained as required which may be outside of operational hours.

Physical Noise Barriers

Acoustic fences and walls will be:

- Inspected monthly by the GEM with any identified failures, gaps or holes placed onto a maintenance report for rectification; and
- Rectifications shall be done using appropriate materials that do not diminish their acoustic qualities.

Air Handling Devices

The two small compressors on the shredder are inspected and serviced regularly. They were part of the original installation and have been included in the approved NVIA at Appendix H. Subsequently, two compressors were installed as part of the floc processing plant, which are also inspected and serviced in a regular basis.

6.2.2 Post-Commissioning Test

Baseline noise and vibration studies were conducted as part of the project and are detailed in the NVIA, refer to Appendix H.

Within ninety (90) days of the final occupation certificate being issued, a post development study was commissioned to validate that noise and vibration levels were within projected criteria. A copy of the final report was sent to the DPIE with sixty (60) days of the report being received.

6.2.3 Truck Mitigation Measures

On Site we have installed a sign in the driveway that states. Truck Drivers are required to:

- Limit use of air and engine breaks
- Keep Engine RPM's to a minimum
- Use horns for emergencies only
- Comply with Site Speed Rules & Limits

6.2.4 Exceedance Contingency Measures

Contingency measures for operational and construction activities, that may be deployed to minimise impacts should an exceedance of the criteria occur or appear likely to occur include:

- Contingency measures shall be determined and put in place, e.g.
  - temporary acoustic walls
  - noise absorbent materials and/or
  - reduce the activity.
- Where contingency measures are not viable the equipment shall be placed out of service and repairs/rectifications conducted.
- Directors will be notified
- Relevant regulating authorities will be notified, where applicable
- The issue will be detailed and its rectification documented for reporting purposes.

7 MONITORING PROGRAM

7.1 Control Measures

Operational hours and noise levels are outlined in Section 5 of this NMP.

7.1.1 Overpressure

An airblast overpressure device is installed at the boundary of the premise which is alarmed to notify of any levels at or above the 120dB (Lineal Peak) limit.

The measures taken to provide mitigation against explosions are;

- 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.

Gas bottles that are unable to be returned to the supplier are stored then collected by an independent company for degassing and destruction.

7.1.2 Engineering Controls

The following engineering controls are proposed to be adopted on site:

- Acoustic panelling
  - Northern boundary existing 4 metres high on 45 Tattersall Road
  - Western boundary a minimum of 8 metres high
  - Eastern boundary 8 metres high
  - Southern boundary 4 metres high on 23 Tattersall Road.
- Hammermill acoustic walls.
- Floc processing
  - Fully enclosed building.
- Trommel separator
  - Semi encapsulation.

7.1.3 Administrative Controls

Table 7: Administrative Controls

Administrative Control	Plan or Section
All onsite employees and contractors will undergo noise related training via Toolbox.	Section 6.0
Maintenance will maintain equipment to manufacturer's standards.	Section 5.5.1
Blast monitoring.	Section 7.2.1
Noise monitoring.	Section 7.3
Noise exceedance.	Section 8.0
Monthly site inspections by the Group Environment Manager.	Section 7.2.2
Verification monitoring at the completion of the project as per Condition B29.	Section 7.2.5
Maintain dialogue with our nearest neighbours. • Notification of future works; • Via phone, email, letterbox drops and informal meetings; and Complaints process	Section 1.6.3 Section 1.6.3 Section 9.0
Enforcement of the NMP will be carried out by the Directors.	This plan

7.1.4 Transport

Transport drivers are made aware of the need to minimise noisy practices through weekly toolbox talks training packages. New signage will be installed to reinforce the training and education processes as required. See Section 6.2.3..

7.1.5 Construction

Contractors doing construction work will be briefed on on-site noise obligations. Control measures during construction will utilise:

- The airblast overpressure device
- The acoustic fences
- Construction plant and equipment inspections
- Meetings with construction personnel.

7.1.6 Acoustic Fencing

There are several different types of acoustic fences used on site. Installation is based on engineering designs and is built to those specifications. The GEM will do a monthly

inspection. Any failures, gaps or holes will be noted on the inspection form. The issues will be reported to the Site Manager and placed onto a maintenance report for rectification.

The rectifications shall be done using appropriate materials that do not diminish the acoustic qualities of the fence.

7.1.7 Air Handling

There are two small compressors installed on both the shredder and the floc processing plant. These are regularly inspected and serviced, as required.

Small portable air compressors are used by maintenance which are regularly inspected and serviced. These meet applicable noise criteria so are not expected to have an impact on the acoustic properties of the development.

7.2 Monitoring Measures

7.2.1 Overpressure

An airblast overpressure device is installed on the premise boundary. The device is programmed to be continuously operational during site working hours specified in consent condition B31 and EPL condition L7.2. The GEM checks the data weekly to verify its operation and to ensure no overpressure incidents were missed. These weekly inspections and findings are documented in the overpressure log.

7.2.2 Inspections

Every month the GEM conducts a site inspection. The inspection checks the physical assets for noise control to ensure compliance with sections B27 to B33 of the Original Approval. The inspection also takes into consideration noise levels from operations and changes in noise levels over time that could indicate deterioration of equipment or their noise mitigation devices. Results of the inspections will be recorded and kept on file.

7.2.3 Testing

This flowchart represents the process to be followed when periodic testing is to be conducted.

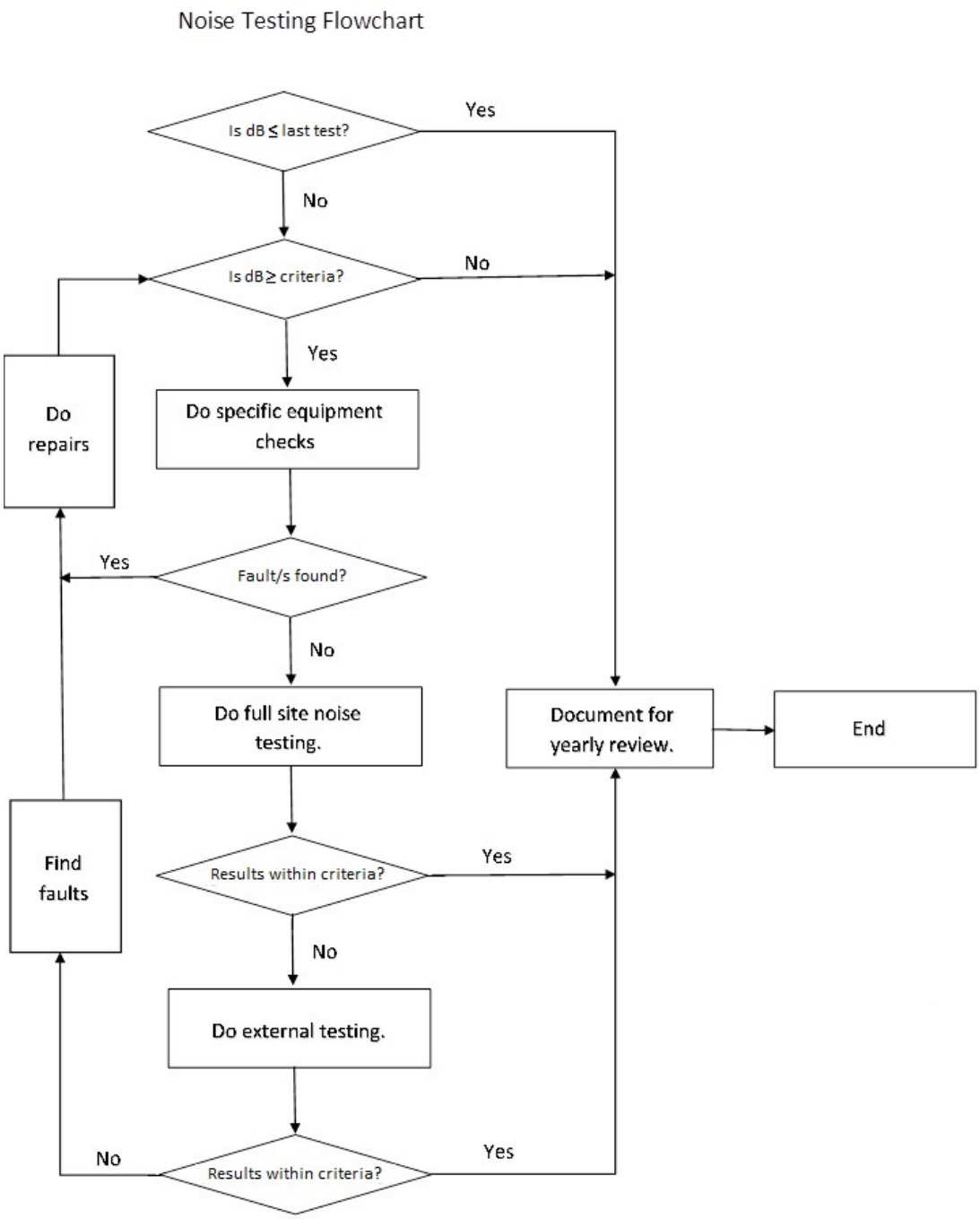


Figure 4: Decision Flowchart for Noise and Vibration Testing (Source: Sell & Parker)

7.2.4 Weather Conditions

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. Monitoring of the weather station is the responsibility of the GEM.

7.2.5 Validation

Within ninety (90) days of the final occupation certificate being issued, Sell & Parker will commission a NVIA with Renzo Tonin (or other suitably qualified external contractor) to determine noise and vibration levels for comparison to pre-development levels and in comparison to modelled predictions. The results of the study will determine what, if any, immediate improvements are required. It will also provide a baseline for future studies to be compared against. A copy of the final report will be sent to the DPIE with sixty (60) days of the report being received.

7.3 Practical Noise Level Compliance Form

The air overpressure monitor functions during operational hours and logs the highest level recorded over a 15 minute period. If an overpressure exceedance of 120dB occurs a blast report of the event is automatically issued which triggers an investigation. The investigation will be conducted by the GEM.

The investigation will involve:

- Review of the air overpressure log
- Discussions with site operators
- Review of CCTV footage (if applicable)
- Equipment inspections (if applicable)
- Documentation of the event in the overpressure log.

If the event is confirmed to be non-compliant the following actions are undertaken by the GEM:

- Cease operation of relevant equipment
- Directors notified
- Formal investigation
- Statutory authorities notified.

The investigation will encompass:

- Reinstatement or repair of equipment
- If operator retraining is required
- Procedural reviews
- Any other actions required to ensure ongoing compliance.

8 CRITERIA EXCEEDANCE PROTOCOL

The GEM is responsible for criteria exceedance protocol checks.

Should there be a confirmed occurrence of an exceedance due to a construction or operational activity then the below corrective actions are initiated.

8.1 Corrective Actions

In the case of an exceedance, environmental corrective actions shall be the responsibility of the GEM. It is their task to ensure:

- The root cause shall be determined
- The issue will be promptly addressed
- Contingency measures shall be determined and put in place, e.g.
  - temporary acoustic walls
  - noise absorbent materials and/or;
  - reduce or cease the activity.
- Where contingency measures are not viable the equipment shall be placed out of service and repairs/rectifications conducted
- Directors are notified
- If required, relevant regulating authorities will be notified
- The issue will be detailed and its rectification documented for reporting purposes;
- An investigation report is completed
- An improvement process is implemented to ensure, the incident is not repeated.

The GEM is responsible for:

- Logging the issue so it will be discussed in the yearly review
- Reviewing the relevant sections of the Blacktown Environment Management System (BEMS), to determine what improvements, if any, can be implemented
- Providing feedback of the resolution process to a complainant if they have elected to be kept informed (refer Section 9.0)
- Handling the event as per the exceedance process and the communication of the event as per the external audit process, when an exceedance is determined through an external audit.

8.2 Incident Management

All incidents and near misses are documented and recorded by the Group Safety Manager (GSM). All issues with an environmental aspect are recorded by the GEM in the environmental incident and near miss register. This data is presented during the yearly review. Negative trends will be investigated and root causes determined. Changes will be made to reduce determined root causes of incidents.

If an event or activity occurs that has, is likely to, or could potentially cause harm to the environment, whether that harm is on or off the premise, the emergency management procedure will be enacted as set out in Section 9.3 below.

8.3 Emergency Management

Environmental emergencies will enact the Pollution Incident Response Management Plan (PIRMP). The PIRMP has been updated to reflect the expansion of the Facility. It is available on the Sell & Parker website, www.sellparker.com.au under 'About Us', 'Links' and 'Environmental Reports'. If the PIRMP is enacted then the EPA and DPIE will be informed as will other regulatory authorities as outlined in the plan.

8.4 Investigations

Environmental incidents and high potential near misses will be scrutinised by the GEM to determine if an investigation is warranted. All proven exceedances will be investigated. When a formal environmental investigation is to be conducted, the GEM will be the lead investigator. Investigations shall be conducted as per the established procedure.

8.5 Reporting and Publishing of Results

All environmental statutory reporting will be conducted by the GEM in consultation with management. Information will be issued after formal approval from a director. All information is available on the Sell & Parker website www.sellparker.com.au, as per Condition C14 in the Original Approval.

9 COMPLAINTS HANDLING PROCEDURE

Complaints are handled as outlined in the complaints handling procedure. Complaints are documented on the complaints handling form and recorded on the complaints handling register. The complaints register is available on the Sell & Parker website, www.sellparker.com.au.

Sell & Parker have a complaints phone number (02 8212 9561) as advertised next to the entry gate at 45 Tattersall Road. Complaints can also be registered through the Sell & Parker website www.sellparker.com.au, or by calling the Facility at 23-45 Tattersall Road, Kings Park on (02) 9621 2633.

The Noise Complaints Flowchart in **Figure 5** outlines how noise complaints shall be checked.

- A handheld noise meter shall be used to determine noise levels on specific equipment.
- If complainant direction is known, testing at nearest boundary point will be conducted.
- These readings shall be compared to previous readings to determine if levels have changed.
- If there has been a notable increase in noise levels in a particular area, specific equipment checks will be conducted.
- If faults are found they will be rectified.
- If after several checks the cause is unable to be determined, then contingency measures (Section 9.1) shall be put in place.
- Discussions regarding further works or changes to reduce the levels will be conducted.
- External testing against criteria will be conducted if issues can’t be resolved.
- Testing is to meet criteria as specified in Section 7.1.2.

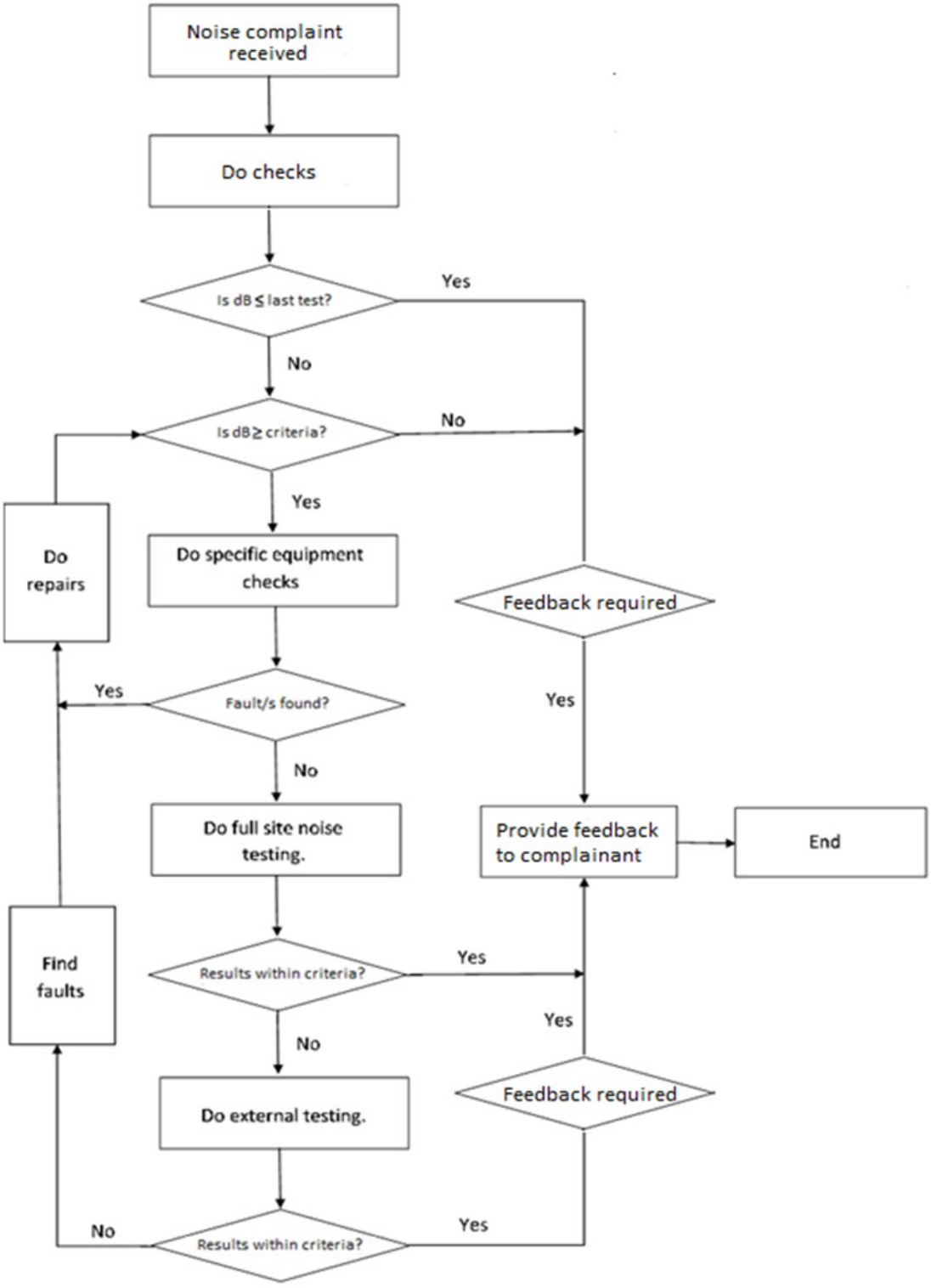


Figure 5: Noise Complaint Procedure Flowchart (Source: Sell & Parker)

10 AUDITS

10.1 Internal

Sell & Parker will conduct topic specific audits to validate that its systems are tracking and controlling environmental aspects that have a potential to cause non-conformances against its regulatory responsibilities. The GEM shall be responsible for audits.

10.2 External

Sell & Parker as per Condition C9 in the Original Approval, will conduct independent audits, conducted by a suitably qualified auditor, to assess the progress of the development against its consent conditions for the life of the consent. The auditor shall:

- be approved by the Secretary as per Condition C9 (a) of the Original Approval;
- meet Condition C9 (b) of the Original Approval; and
- audit against Conditions C9 (c), (d), (e) and (f) of the Original Approval.

The results of the audit will be presented to the Sell & Parker board and be available on the Sell & Parker website.

Within three (3) months of commissioning the audit, a copy of the report with Sell & Parker responses to any recommendations made will be provided to the Secretary.

11 NOISE MANAGEMENT PLAN REVIEW

As per condition C12 of the Original Approval, a review of relevant sections of the BEMS will be instigated:

- when conducting an annual review;
- after an incident that results in regulator notification;
- when conducting an external third party audit; and
- when modifying the consent.

A yearly review of the development including the environmental performance of the operations, shall be presented at a Board Meeting. Issues to be discussed in the meeting include, but are not limited to, the items listed in Condition C11 of the Original Approval.

As part of Sell & Parker's continuous improvement commitment, to ensure compliance now and in the future, the NMP will be revised as required to incorporate measures, protocols or procedures to improve the environmental performance of the Facility.

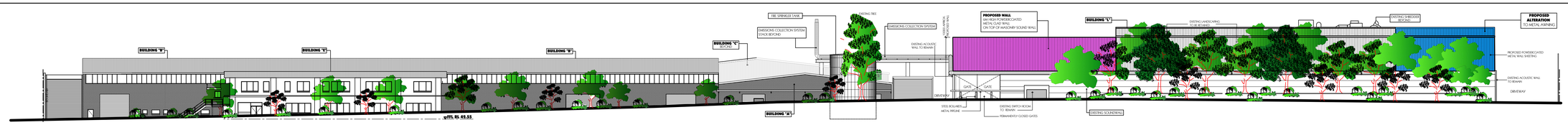
12 REVIEW OF PLANS

As per Condition C13 of the Original Approval, the operation of the Facility will be "undertaken in accordance with all relevant updated and/or amended strategies, management plans and programs approved by the Secretary (or as revised and approved by the Secretary), unless otherwise agreed by the Secretary".

Should a modification to the Original Approval be approved, the relevant management plan/s will be updated and sent to the Secretary for approval.

Rev. No	Rev. Date	Revision Description	Prepared by	Approved By	Signed
A	February 2017	New document	MH	CM	MH
B	July 2017	Revised Site Layout	MH	CM	MH
C	October 2017	Revised Site Layout – LEC S96	MH	CM	MH
D	March 2018	Revised Site Layout	MH	CM	MH
E	September 2019	Changes associated with Mod 3	FM, SF	HR	HR

APPENDIX A AMENDED SITE LAYOUT



STREETVIEW ELEVATION

TATTERSALL RD

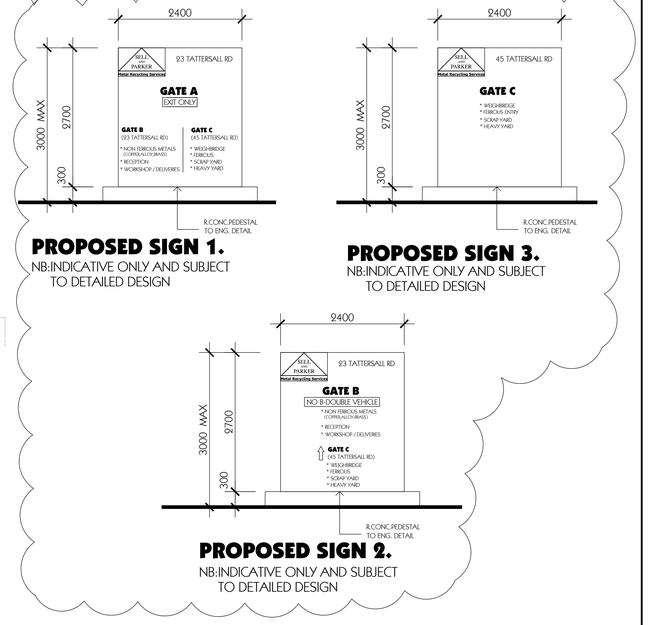
SITE PLAN

LEGEND

- EXISTING STRUCTURE TO REMAIN
- EXISTING STRUCTURE TO BE REMOVED
- PROPOSED ALTERATIONS & ADDITIONS
- EXISTING STRUCTURE TO BE FOR REUSE OR TO BE RELOCATED
- PROPOSED WALL EXTENSION
- LANDSCAPED AREAS TO REMAIN

DEVELOPMENT DATA

SITE AREA	59 475 M2 approx.		
	FLOOR AREAS		
	W'HOUSE / EQUIPMENT STORE	OFFICE /AMEN	AWNING
BUILD "A"	1278 M2	194 M2	
BUILD "B"	3162 M2	488 M2	
BUILD "C"	2981 M2	-------	106 M2
BUILD "D"	415 M2	-------	
BUILD "E"	984 M2	-------	
BUILD "F"	494 M2	-------	
BUILD "G"	81 M2	-------	
BUILD "H"	25 M2	-------	
BUILD "J"	17 M2	-------	
BUILD "K"	47 M2	-------	
BUILD "L"	593 M2	-------	
TOTAL	10 077 M2	462 M2	106 M2



PROPOSED SIGN 1.
NB:INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN

PROPOSED SIGN 3.
NB:INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN

PROPOSED SIGN 2.
NB:INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN

Issue	By	Description	Date
A	CZ	SECTION 96	01/06/18
B	CZ	MODIFICATION APPLICATION 4.55	03/19/18
C	CZ	MODIFICATION APPLICATION 4.55	21/01/19
D	CZ	MODIFICATION APPLICATION 4.55	29/01/19

GENERAL NOTES

1) All dimensions and floor areas are to be verified by the Builder prior to the commencement of any building work. Any discrepancies are to be brought to the attention of the designer.
2) Levels shown are approximate unless accompanied by reduced levels.
3) Figured dimensions must be taken in preference to scaling.
4) All boundary clearances must be verified by the surveyor prior to the commencement of any building works.
5) Where engineering drawings are required such must take preference to this drawing.
6) Stormwater to be discharged to Councils' requirements and AS 3500.3–1990.
7) All services to be located and verified by the Builder with relevant authorities before any building work commences.

Consultants

Date	NOVEMBER 2017
Scale	1:500 UNO
Drawn	J.LARIA
Checked	C.ZAPPIA
Certified	

ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
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Consulting Civil & Structural Engineers & Building Designers
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E-mail: admin@algorryzappia.com.au
Web: www.algorryzappia.com.au

Project: PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45 TATTERSALL RD, KINGS PARK

Client: SELL & PARKER METAL — Project No.: P4144

Title: DEVELOPMENT APPLICATION — Activity Type: DA — Job No.: 9189-17 — Sheet No.: A101 — Issue: D

B1 SHEET

APPENDIX B ENVIRONMENTAL POLICY

SELL AND PARKER
Metal Recycling Services

ENVIRONMENTAL POLICY

This Policy applies to all Sell and Parker and associates entities (Sell and Parker) employees, contractors and visitors.

Sell and Parker are committed to achieving a clean and healthy environment by providing services, conducting operations and recycling material that will not cause harm to the environment.

Sell and Parker are committed to minimizing our environmental footprint in the course of our business operations.

Sell and Parker are committed to developing, implementing and maintaining an Environmental Management System (EMS) that complies with the requirements of international standard ISO 14001.

We will meet these commitments through the following objectives:

- Ensure all employees, contractors and associates have an understanding of this Policy, the EMS, Storm water Management Plan and Safe Working Procedures.
- Ensure all operations are undertaken in an environmentally responsible manner and in accordance with the relevant environmental legislation, regulations, statutory obligations and relevant voluntary codes of practice.
- Measure, monitor and report on environmental initiatives.
- Regularly review our business operations to identify and implement opportunities for improvement.
- Record, investigate and implement the appropriate corrective action for all environment incidents.
- Periodically review and revise this Policy and Safe Working Procedures to maintain their relevance.

Sell and Parker reserves the right to remove from the work site anyone who breaches these conditions. For employees any breach of this Policy will be considered serious and may result in disciplinary action, up to and including termination of employment, legal action could be taken against them and they could be exposing Sell and Parker to liability.

All Sell and Parker Managers are held accountable for ensuring this Policy is effectively implemented.

Responsibility for the application of this Policy lies with all Sell and Parker employees, contractors and visitors undertaking activities on behalf of Sell and Parker and within Sell and Parker control.

Luke Parker
Director
Sell and Parker Pty Ltd

Morgan Parker
Director
Sell and Parker Pty Ltd

APPENDIX C ORIGINAL APPROVAL

Development Consent

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

I grant consent to the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

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

Daniel Keary
A/Executive Director
Key Sites and Industry Assessments

Sydney 12th NOVEMBER 2015

SCHEDULE 1

Application No.:	SSD 5041
Applicant:	Sell and Parker Pty Ltd
Consent Authority:	Minister for Planning
Land:	23-43 and 45 Tattersall Road, Kings Park (Lot 2 DP 550522 and Lot 5 DP 7086)
Development:	Increasing the processing capacity of the existing metal recycling facility, including reconfiguration and expansion of the facility into the adjoining site at 23-43 Tattersall Road, Kings Park.

TABLE OF CONTENTS

DEFINITIONS

Act	*Environmental Planning and Assessment Act 1979*
Applicant	Sell and Parker Pty Ltd, or anyone else entitled to act on this consent
Construction	The demolition of buildings or works, the carrying out of works, including bulk earthworks, and erection of buildings and other infrastructure covered by this consent
Council	Blacktown City Council
Day	The period from 7 am to 6 pm on Monday to Saturday
Department	Department of Planning and Environment
Development	The development that is approved by this development consent and as generally described in Schedule 1
EIS	Environmental Impact Statement prepared by ERM dated July 2014
ENM	Excavated Natural Material
EPA	Environment Protection Authority
EPL	Environment Protection Licence under the *Protection of the Environment Operations Act 1997*
Evening	The period from 6 pm to 10 pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Heavy vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Heritage Item	An item as defined under the *Heritage Act 1977*, and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974.*
Incident	A set of circumstances that: • causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Morning shoulder	The period from 6 am to 7 am on Monday to Saturday
OEH	Office of Environment and Heritage
Operation	The receipt or processing of waste
POEO Act	*Protection of the Environment Operations Act 1997*
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Regulation	*Environmental Planning and Assessment Regulation 2000*
Secretary	Secretary of the Department, or nominee
Site	Land referred to in Schedule 1
VENM	Virgin Excavated Natural Material

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A1. The Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the Development.

TERMS OF CONSENT

A2. The Applicant shall carry out the Development in accordance with the:
- a) EIS prepared by ERM dated July 2014;
- b) Response to Submissions report prepared by ERM dated 7 January 2015;
- c) Supplementary Response to Submissions prepared by Mecone dated 30 June 2015;
- d) Supplementary Response to Submissions prepared by Sell and Parker Pty Ltd dated 3 September 2015;
- e) Site layout plans and drawings (See Appendix A); and
- f) Management and Mitigation Measures (see Appendix B).

A3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.

A4. The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
- a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent; and
- b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

STATUTORY REQUIREMENTS

A5. The Applicant shall ensure that all licences, permits, and approvals/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals/consents.

BUILDING CODE OF AUSTRALIA

A6. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the *Building Code of Australia*.

LIMITS OF CONSENT

Waste limits

A7. The Applicant shall not receive or process on the site more than 350,000 tonnes per calendar year of waste, subject to Condition A8.

A8. Despite Condition A7, the Applicant shall not receive or process on the site more than 90,000 tonnes per calendar year of waste (on a weekly pro-rata basis) until:
- a) the Emissions Collection System for the hammer mill has been commissioned in accordance with Condition B20 and approved by the Secretary for operation; and
- b) a Final Occupation Certificate has been issued for the Development.

A9. In deciding whether to grant approval to operate the Emissions Collection System for the hammer mill in accordance with Condition A8, the Secretary shall take into account the Commissioning Report submitted in accordance with Condition B21.

A10. The Applicant must record the amount of waste (in tonnes) received at the site on a daily basis.

Waste type

A11. The Applicant shall not cause, permit or allow any materials or waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by an EPL.

DEMOLITION

A12. The Applicant shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version.

SURRENDER OF CONSENT

A13. In order for the development of land to proceed in a coordinated and orderly manner and to avoid potential conflicts with this consent, the Applicant shall and in the manner prescribed by clause 97 of the Regulation, surrender the development consents described in Table 1 within 14 days of the issue of a Construction Certificate for the Development.

Table 1 – Consents to be surrendered

Development Application No. DA-96-305	
Land description	45 Tattersall Road, Kings Park
Development Description	Metal recycling facility on the southern portion of the site.
Date	27 November 1996
Development Application No. 10204 of 2000	
Land description	45 Tattersall Road, Kings Park
Development Description	Establishment of a hammermill and associated components and an approved handling capacity of 60,000 tpa on the northern portion of the site.
Date	11 May 2001

STAGED SUBMISSION OF PLANS OR PROGRAMS

A14. With the approval of the Secretary, the Applicant may:
a) submit any strategy, plan or program required by this consent on a progressive basis; and/or
b) combine any strategy, plan or program required by this consent.

A15. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant shall continue to implement existing strategies, plans or programs for operations on site that have been approved by previous consents or approvals.

Note:

- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages and the trigger for updating the strategy, plan or program.*
- *There must be a clear relationship between the strategy, plan or programs that are to be combined.*

OPERATION OF PLANT AND EQUIPMENT

A16. The Applicant shall ensure that all plant and equipment used for the Development is:
   a) maintained in a proper and efficient condition; and
   b) operated in a proper and efficient manner.

METEOROLOGICAL MONITORING

A17. Within 14 days of the issue of a Construction Certificate for the Development, the Applicant shall install a suitable meteorological station on the site that complies with the requirements in the latest version of the *Approved Methods for Sampling of Air Pollutants in New South Wales*. The Applicant shall operate the meteorological station for the life of the Development.

PROTECTION OF PUBLIC INFRASTRUCTURE

A18. The Applicant shall:
   a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Development; and
   b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Development.

DISPUTE RESOLUTION

A19. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

PART B ENVIRONMENTAL PERFORMANCE

WASTE MANAGEMENT

B1. Within 14 days of the issue of a Construction Certificate for the Development, the Applicant shall implement a Waste Monitoring Program for the Development. The program must:
   a) be prepared by a suitably qualified and experienced person(s);
   b) include suitable provisions to monitor the:
      (i) quantity, type and source of waste received on site; and
      (ii) quantity, type and quality of the outputs produced on site.
   c) ensure that:
      (i) all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; and
      (ii) staff receive adequate training in order to be able to recognise and handle any hazardous or other prohibited waste including asbestos.

SOIL AND WATER

Compliance Certificate

B2. A Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained from Sydney Water prior to the commencement of construction.

Pollution of waters

B3. The Development shall comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided in an EPL.

Water Management Plan

B4. Prior to the commencement of construction of the Development, the Applicant shall prepare a Water Management Plan to the satisfaction of the Secretary. The plan must:
   a) be prepared by a suitability qualified and experienced person(s) in consultation with the EPA;
   b) include a detailed site water balance;
   c) include details of water management, monitoring and incident response arrangements;
   d) include the details of the:
      (i) Water Management System for the site (see Condition B6);
      (ii) Water Management System commissioning, including the time frames for each stage of the commissioning (see Condition B7);
      (iii) Water Treatment Plant Trial, if required (see Condition B8);
      (iv) erosion and sediment controls (see Condition B9);
      (v) bunding (see Condition B10);
      (vi) flood management (see Condition B11); and
      (vii) clean water runoff areas that discharge direct to stormwater without treatment (i.e. car parks and roofs).

B5. The Applicant shall carry out the Development in accordance with the Water Management Plan approved by the Secretary (as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

Water Management System

B6. The Applicant shall operate a Water Management System for the site. The system must:
   a) be designed by a suitably qualified and experienced person(s) in consultation with the EPA;
   b) include a treatment system with primary, secondary and tertiary treatment components;
   c) be consistent with the guidance in *Managing Urban Stormwater - Soils and Construction Vol. 1* (Landcom, 2004);
   d) divert clean surface water around operational areas of the site;
   e) include water quality monitoring that can determine the performance of the water management system against the EPL discharge limits;
   f) include water reuse based on a risk assessment of environment and human health impacts; and
   g) be commissioned in accordance with Condition B7.

Water Management System commissioning

B7. The Applicant shall commission the Water Management System prior to discharging any water from the site. The commissioning must:

a) be completed within 2 years from the date of this consent, or within such other time agreed in writing by the Secretary;
b) be undertaken by a suitability qualified and experienced person(s) in consultation with the EPA;
c) include a program for acquiring baseline data of receiving waters and the establishment of site specific stormwater discharge criteria in the EPL;
d) including testing of the performance of all components of the Water Management System, including the primary, secondary, and tertiary treatment systems;
e) identify and implement changes to the Water Management System that may be necessary to achieve compliance with the discharge criteria in the EPL; and
f) include off-site trials of treatment technologies if necessary.

Water Treatment Plant trial

B8. As part of commissioning the Water Management System, the Applicant may implement off-site trials of components of the Water Management System. Any trial must be conducted by a suitably qualified and experienced person(s) in consultation with the EPA.

Erosion and sediment control

B9. The Applicant shall implement erosion and sediment control measures on-site in accordance with *Managing Urban Stormwater: Soils and Construction Vol. 1* (Landcom, 2004).

Bunding

B10. The Applicant shall store all chemicals, fuels and oils used on-site 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.*

Flood management

B11. The Applicant shall ensure that:

a) the finished floor level of any new building is a minimum of 0.5 metres above the 1 in 100 year Average Recurrence Interval flood level;
b) any part of a new structure below the 1 in 100 year Average Recurrence Interval flood level is designed and constructed to be compatible with flooding; and
c) any perimeter fence or wall does not restrict or impede the flow of overland flow.

Imported soil

B12. The Applicant shall:

a) ensure that only VENM, or ENM, or other material approved in writing by the EPA is used as fill on the site;
b) keep accurate records of the volume and type of fill to be used; and
c) make these records available to the Department upon request.

Contamination

B13. Prior to commencing any excavation works, the Applicant shall:

a) identify all potential contaminants that could be disturbed, mobilised and discharged to receiving waters;
b) detail the procedures for testing, classifying, handling, storing and disposing of contaminated water, soils and/or groundwater encountered in excavations, in particular during excavation of the stormwater detention basin; and
c) detail the measures for periodically testing surface water run-off that may accumulate in excavations, and the procedures for off-site disposal of contaminated water.

B14. The Applicant shall provide a contamination report to the Department detailing any contamination investigation carried out in the immediate vicinity of the existing detention basin. This report shall be provided to the Department on completion of the works to upgrade the detention basin.

AIR QUALITY

Odour

B15. The Applicant shall ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

Emissions limits

B16. The Applicant shall ensure that emissions from the Development do not exceed the emission limits specified in the EPL.

Air Quality Management Plan

B17. Prior to the commencement of construction of the Development, the Applicant shall prepare an Air Quality Management Plan to the satisfaction of the Secretary. The plan must:

a) be prepared by a suitably qualified and experienced person(s) in consultation with the EPA;
b) describe the measures that would be implemented to ensure:
   (i) all reasonable and feasible measures are employed to minimise air emissions;
   (ii) compliance with the relevant conditions of this consent;
   (iii) contingency measures are deployed to minimise impacts should adverse air emissions occur or appear likely to occur;
c) include well defined triggers for the deployment of construction and operational air quality measures;
d) include well defined triggers for ceasing or partially ceasing operations on site during adverse air quality conditions;
e) include an Air Quality Monitoring System to evaluate the performance of the Development commensurate with the system proposed in the Air Quality Assessment, prepared by ERM dated September 2015;
f) include details of the location, frequency and duration of monitoring; and
g) include a protocol to determine the occurrence of any exceedance of the criteria in the EPL should an exceedance occur.

B18. The Applicant shall carry out the Development in accordance with the Air Quality Management Plan approved by the Secretary (as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

Air emissions mitigation

B19. The Applicant shall:

a) operate the Development so that air emissions are minimised during all meteorological conditions; and
b) implement best management practice, including all reasonable and feasible air and odour emissions mitigation measures to minimise emissions from the Development, including but not limited to:
   (i) installation of an Emissions Collection System servicing the hammer mill that is capable of achieving emission control performance equivalent to the system described in the Air Quality Assessment prepared by ERM dated September 2015;
   (ii) operating one oxy-acetylene torch at a time;
   (iii) operating the oxy-acetylene torch only between the hours of 9 am and 3 pm;
   (iv) cutting any metal beam that is up to 100 millimetres thick with the shear, where possible;
   (v) enclosure of all conveyors and conveyor transfer points;
   (vi) dust suppression through the use of water sprays/misters;
   (vii) sealing of on-site surfaces and regularly maintaining them to prevent dust re-entrainment from vehicle movements and other equipment use; and
   (viii) installation of appropriate dust screens at the property boundaries.

Emissions Collection System commissioning

B20. The Applicant shall commission the Emissions Collection System for the hammer mill. The commissioning must:

a) be undertaken by a suitability qualified and experienced person(s) in consultation with the EPA;

b) test the performance of the system against the performance parameters set out in the Air Quality Assessment prepared by ERM dated September 2015; and
c) identify and implement any changes to the system that may be necessary to achieve environmental air quality performance commensurate with that set out in the Air Quality Assessment prepared by ERM dated September 2015.

Commissioning Report

B21. The Applicant shall submit to the Secretary a Commissioning Report detailing the outcomes of the commissioning of the Emissions Collection System for the hammer mill.

Construction emissions mitigation

B22. During construction, the Applicant shall ensure that:
a) all vehicles on site do not exceed a speed of 30 kilometres per hour;
b) all loaded construction vehicles entering or leaving the site have their loads covered; and
c) all construction vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking the materials on public roads.

Stockpile management

B23. The Application shall manage stockpiles of scrap metal and processed material to ensure air emissions are minimised.

EXPLOSION LIMITS

Airblast overpressure

B24. The Applicant shall undertake all reasonable and feasible measures necessary to prevent explosions from occurring at the Premises.

B25. The Applicant shall ensure that the airblast overpressure level from any explosions on the premises does not exceed 120dB (Lin Peak) when measured at the boundary of the premises.

NOISE AND VIBRATION

Noise criteria

B26. The Applicant shall ensure that noise generated by the construction and/or operation of the Development does not exceed the noise criteria in Table 2.

Table 2: Noise criteria (dB(A))

Location	Noise criteria (dB(A))			
	Day	Evening	Morning Shoulder	
	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (1\ minute)}$
189 Sunnyholt Road	46	46	46	58

Noise compliance measurement

B27. Noise generated by the Development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the latest version of the *NSW Industrial Noise Policy*.

Vibration criteria

B28. The Applicant shall ensure that vibration resulting from the Development does not exceed the continuous or impulsive vibration criteria in EPA's *Assessing Vibration: A Technical Guideline* (February 2006) at residential receivers.

Noise Management Plan

B29. Prior to the commencement of construction of the Development, the Applicant shall prepare a Noise Management Plan to the satisfaction of the Secretary. The plan must:
a) be prepared by a suitably qualified and experienced persons(s) in consultation with the EPA;
b) describe the measures that would be implemented to ensure:
(i) all reasonable and feasible measures are employed to minimise noise impacts;

(ii) the installation and maintenance of appropriate physical noise barriers;
(iii) air handling devices are designed and located to minimise noise impacts;
(iv) truck drivers are aware of suitable truck noise mitigation measures;
(v) contingency measures are deployed to minimise impacts should an exceedence of the criteria occur or appear likely to occur; and
(vi) compliance with the relevant conditions of this consent;

c) include a Noise Monitoring Program to evaluate the performance of the Development; and

d) include a protocol to determine the occurrence of an exceedence of the criteria in this consent should such an exceedence occur.

B30. The Applicant shall carry out the Development in accordance with the Noise Management Plan approved by the Secretary (as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

Construction and operation hours

B31. The Applicant shall comply with the construction and operation hours in Table 3 unless otherwise agreed to in writing by the Secretary.

Table 3: Hours of Construction and Operation

Activity		Day	Hours
Construction		Monday – Friday	7 am to 6 pm
		Saturday	8 am to 1 pm
		Sunday & Public Holidays	Nil
Operation	Oxy-acetylene torch cutting	Monday – Saturday	9 am to 3 pm
		Sunday & Public Holidays	Nil
	All other activities	Monday – Saturday	6 am to 9 pm
		Sunday & Public Holidays	Nil

B32. Despite condition B31, the delivery of material to the site may occur at any time, if that delivery is required by police or other authorities; and/or of there is an on-site emergency that poses an immediate danger to personnel or equipment; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification shall be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

Noise mitigation

B33. The Applicant shall:

a) implement best management practice, including all reasonable and feasible noise management and mitigation measures to prevent and minimise operational, low frequency and traffic noise generated by the Development;

b) minimise the noise impacts of the Development during adverse meteorological conditions;

c) maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; and

d) regularly assess noise monitoring data and relocate, modify and/or stop operations to ensure compliance with the noise criteria in this consent.

TRAFFIC AND ACCESS

B34. The Applicant shall ensure that:

a) site access, driveways and parking areas are constructed and maintained in accordance with the latest versions of *Australian Standard AS 2890.1* and *AS 2890.2*;

b) the swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, is in accordance with *AUSTROADS Guide to Road Design*;

c) the Development does not result in any vehicles parking or queuing on the public road network;

d) all vehicles are wholly contained on site before being required to stop;

e) all loading and unloading of heavy vehicles is carried out on-site;

f) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times; and
g) all vehicles enter and leave the site in a forward direction.

HAZARD AND RISK

Fire management

B35. The Applicant shall:
a) implement suitable measures to minimise the risk of fire on-site including but not limited to the recommendations in the *Preliminary Hazard Analysis of Sell & Parker Pty Ltd Metal Recycling Facility Expansion* prepared by Arriscar dated 10 March 2014;
b) ensure the height of any stock pile of shredder floc does not exceed 4 metres;
c) extinguish any fires on-site promptly; and
d) maintain adequate fire-fighting capacity on-site.

Emergency Response

B36. The Applicant shall prepare and implement an emergency response plan for the site. The plan must:
a) include a risk assessment of likely incidents that could occur on-site (e.g. spills, explosion, fire and flood) based on the activities being undertaken, site risks and consequence to the receiving environment;
b) include the early warning flood readiness and evacuation plan for the site;
c) document the systems and procedures to deal with the types of incidents identified including relevant incident notification procedures; and
d) be accessible on the site at all times.

VISUAL AMENITY

Lighting

B37. All external lighting associated with the Development shall be mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadways. The lighting shall be the minimum level of illumination necessary and shall comply with *Australian Standard AS 4282 1997*.

Signage

B38. The Applicant shall install any new signage in consultation with Council.

Note: This condition does not apply to signage identified as exempt or complying development in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Landscaping

B39. Prior to the commencement of construction of the Development, the Applicant shall prepare a Landscape Management Plan to the satisfaction of the Secretary. The plan shall:
a) be prepared by a suitably qualified and experienced person(s);
b) detail the landscaping measures including vegetation that would be implemented to minimise the visual impact of the Development, particularly from adjoining premises and public vantage points;
c) describe the measures to be implemented to protect and retain the mature trees along the northern boundary of the site; and
d) include measures for monitoring and maintenance of revegetated areas.

B40. The Applicant shall carry out the Development in accordance with the Landscape Management Plan approved by the Secretary (as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

HERITAGE

B41. The Applicant shall cease all works on site in the event that any Aboriginal cultural object(s) or human remains are uncovered onsite. The NSW Police, the Aboriginal Community and the

OEH are to be notified. Works shall not resume in the designated area until consent in writing from the NSW Police and/or the OEH has been obtained.

SECURITY

B42. The Applicant shall:
a) install and maintain a perimeter fence and security gates on the site; and
b) ensure that the security gates on site are locked whenever the site is unattended.

PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Construction Environmental Management Plan

C1. Prior to the commencement of construction of the Development, the Applicant shall prepare a Construction Environmental Management Plan to the satisfaction of the Secretary. The Plan must:

a) be prepared by a suitably qualified and experienced person(s);
b) describe all activities to be undertaken on the site during construction, including a clear indication of construction stages;
c) identify the statutory approvals that apply to the Development;
d) outline all environmental management practices and procedures to be followed during construction (e.g. construction traffic management and construction noise and vibration management), including all reasonable and feasible mitigation measures to protect the amenity of the surrounding environment;
e) detail how the environmental performance of construction will be monitored, and what actions will be taken to address identified adverse environmental impacts;
f) describe of the roles and responsibilities for all relevant employees involved in construction;
g) include arrangements for community consultation and complaints handling procedures during construction; and
h) consolidate the construction related parts of any management plans and monitoring programs required in the conditions of this consent;

C2. The Applicant shall carry out the development in accordance with the Construction Environmental Management Plan approved by the Secretary (as revised approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

Operational Environmental Management Strategy

C3. Within 6 months of the date of this consent, the Applicant shall prepare an Operational Environmental Management Strategy to the satisfaction of the Secretary. This strategy must:

a) be prepared by a suitably qualified and experienced person(s);
b) provide a strategic framework for environmental management of the Development;
c) identify the statutory approvals that apply to the Development;
d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;
e) describe in general how the environmental performance of the Development would be monitored and managed; and
f) describe the procedures that would be implemented to:
   (i) keep the local community and relevant agencies informed about the operation and environmental performance of the Development;
   (ii) receive, handle, respond to, and record complaints;
   (iii) resolve any disputes that may arise;
   (iv) respond to any non-compliance; and
   (v) respond to emergencies.

C4. The Applicant shall carry out the Development in accordance with the Operational Environmental Management Strategy approved by the Secretary (as revised approved by the Secretary from time to time), unless otherwise agreed by the Secretary.

Management plan requirements

C5. The Applicant shall ensure that the environmental management plans/strategies required under this consent are prepared in accordance with any relevant guidelines and include:

a) detailed baseline data;
b) a description of:
   (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
   (ii) any relevant limits or performance measures/criteria;

(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;
(iv) the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;

c) a program to monitor and report on the:
(i) impacts and environmental performance of the Development;
(ii) effectiveness of any management measures;
(iii) a contingency plan to manage any unpredicted impacts and their consequences;
(iv) a program to investigate and implement ways to improve the environmental performance of the Development over time;

d) a protocol for managing and reporting any:
(i) incidents;
(ii) complaints;
(iii) non-compliances with statutory requirements; and
(iv) exceedances of the impact assessment criteria and/or performance criteria; and
(v) a protocol for periodic review of the plan.

C6. The Secretary may waive some of the requirements in Condition C5 if they are unnecessary or unwarranted for particular management plans/strategies.

REPORTING

Incident reporting

C7. The Applicant shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the Development, the Applicant shall notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular reporting

C8. The Applicant shall provide regular reporting on the environmental performance of the Development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

C9. Within 1 year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the Development. This audit must:
a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
b) led by a suitably qualified auditor, and include experts in fields specified by the Secretary;
c) include consultation with the relevant agencies;
d) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals and relevant EPL/s (including any assessment, plan or program required under the approvals);
e) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and
f) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under the consents.

C10. Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

Annual review

C11. Within 1 year of the date of this consent, and every year thereafter, the Applicant shall review the environmental performance of the Development. This review must:

a) describe the Development that was carried out in the previous calendar year, and the Development that is proposed to be carried out over the next year;

b) include a comprehensive review of the monitoring results and complaints records of the Development over the previous calendar year, which includes a comparison of the results against the:

(i) the relevant statutory requirements, limits or performance measures/criteria;

(ii) requirements of any plan or program required under this consent;

(iii) the monitoring results of previous years; and

(iv) the relevant predictions in the EIS;

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

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

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

f) describe what measures will be implemented over the next year to improve the environmental performance of the Development.

Revision of strategies, plans and programs

C12. Within 3 months of the submission of an:

a) annual review under Condition C11 above;

b) incident report under Condition C7 above;

c) audit under Condition C9 above; or

d) any modification to this consent,

the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent.

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

C13. The Applicant shall ensure that the operation of the Development is undertaken in accordance with all relevant updated and/or amended strategies, management plans and programs approved by the Secretary (or as revised and approved by the Secretary), unless otherwise agreed by the Secretary.

ACCESS TO INFORMATION

C14. The Applicant shall:

a) make copies of the following publicly available on its website:

(i) the documents referred to in Condition A2;

(ii) all current statutory approvals for the Development;

(iii) all approved strategies, plans and programs required under the conditions of this consent;

(iv) a comprehensive summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;

(v) a complaints register, updated on a monthly basis;

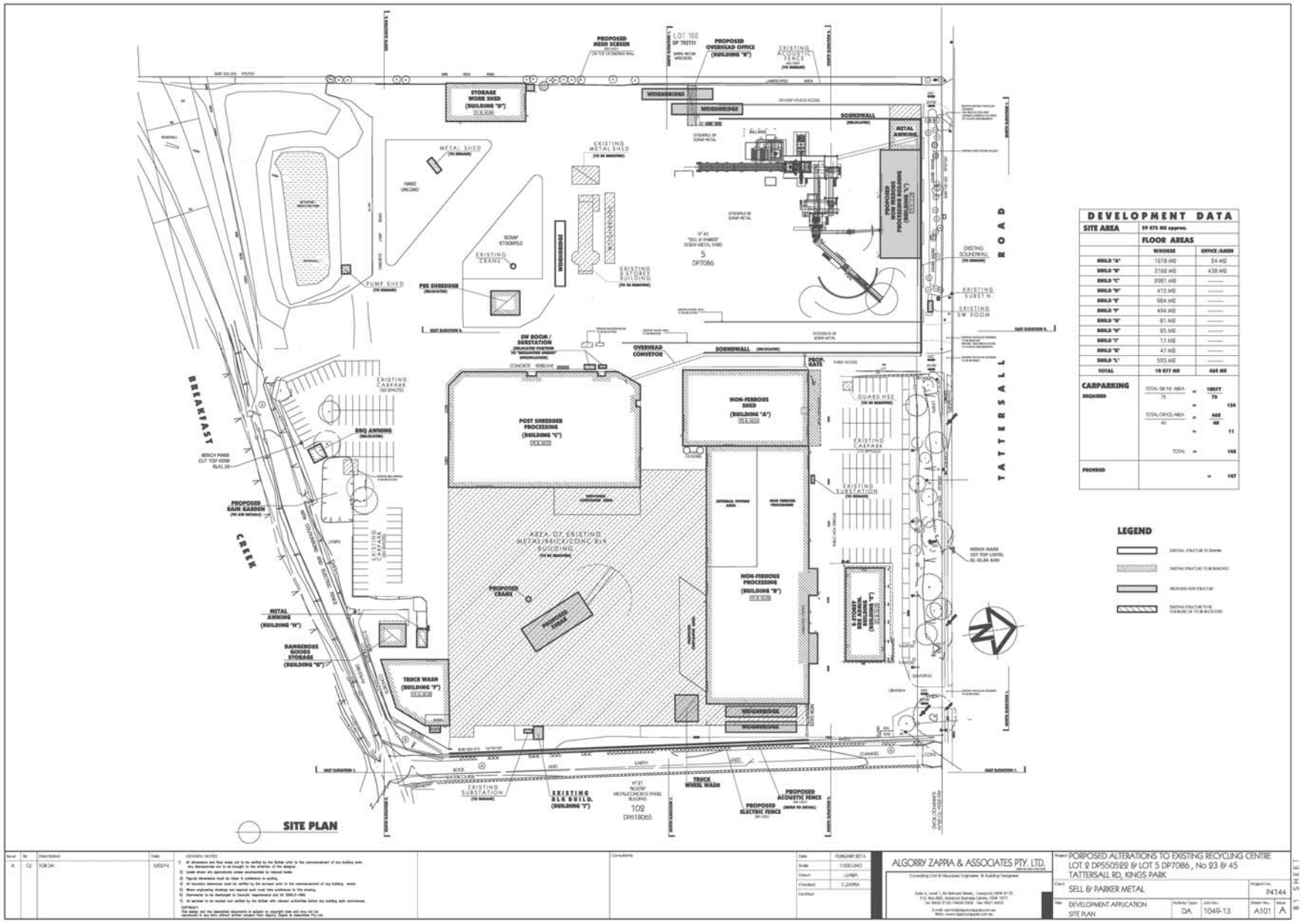
(vi) the annual reviews of the Development;

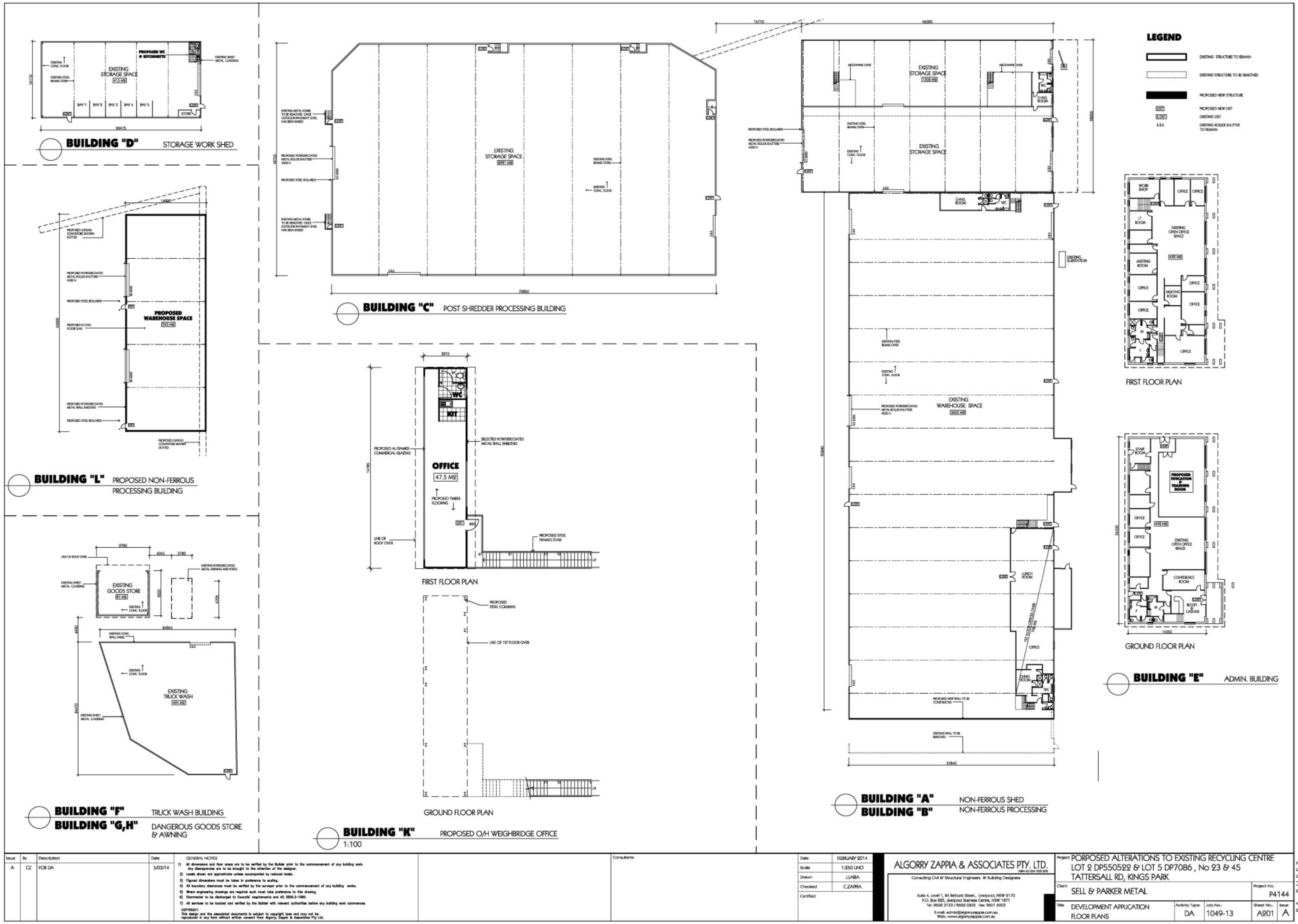
(vii) any independent environmental audit of the Development, and the Applicant's response to the recommendations in any audit; and

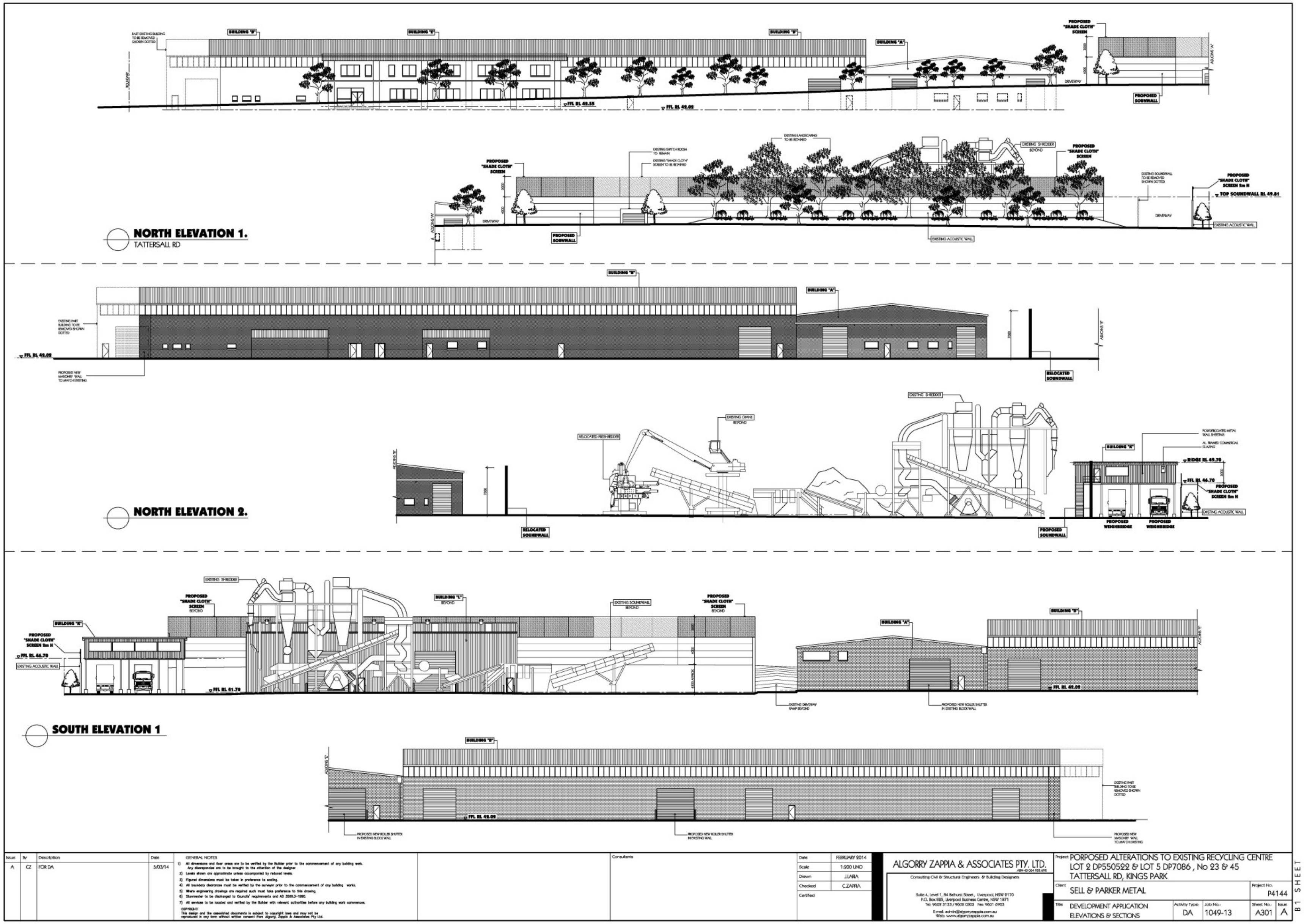
(viii) any other matter required by the Secretary; and

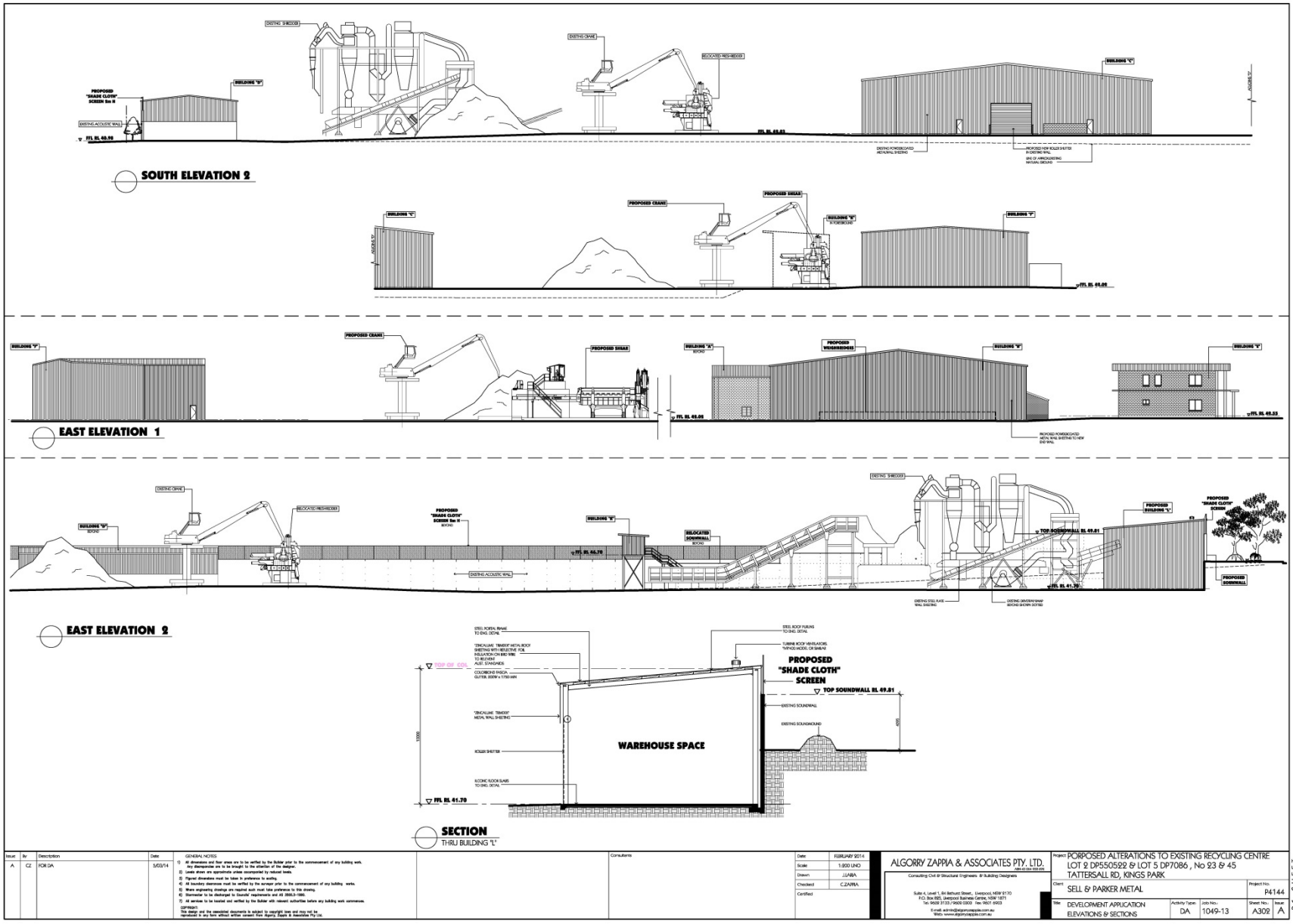
b) keep this information up to date.

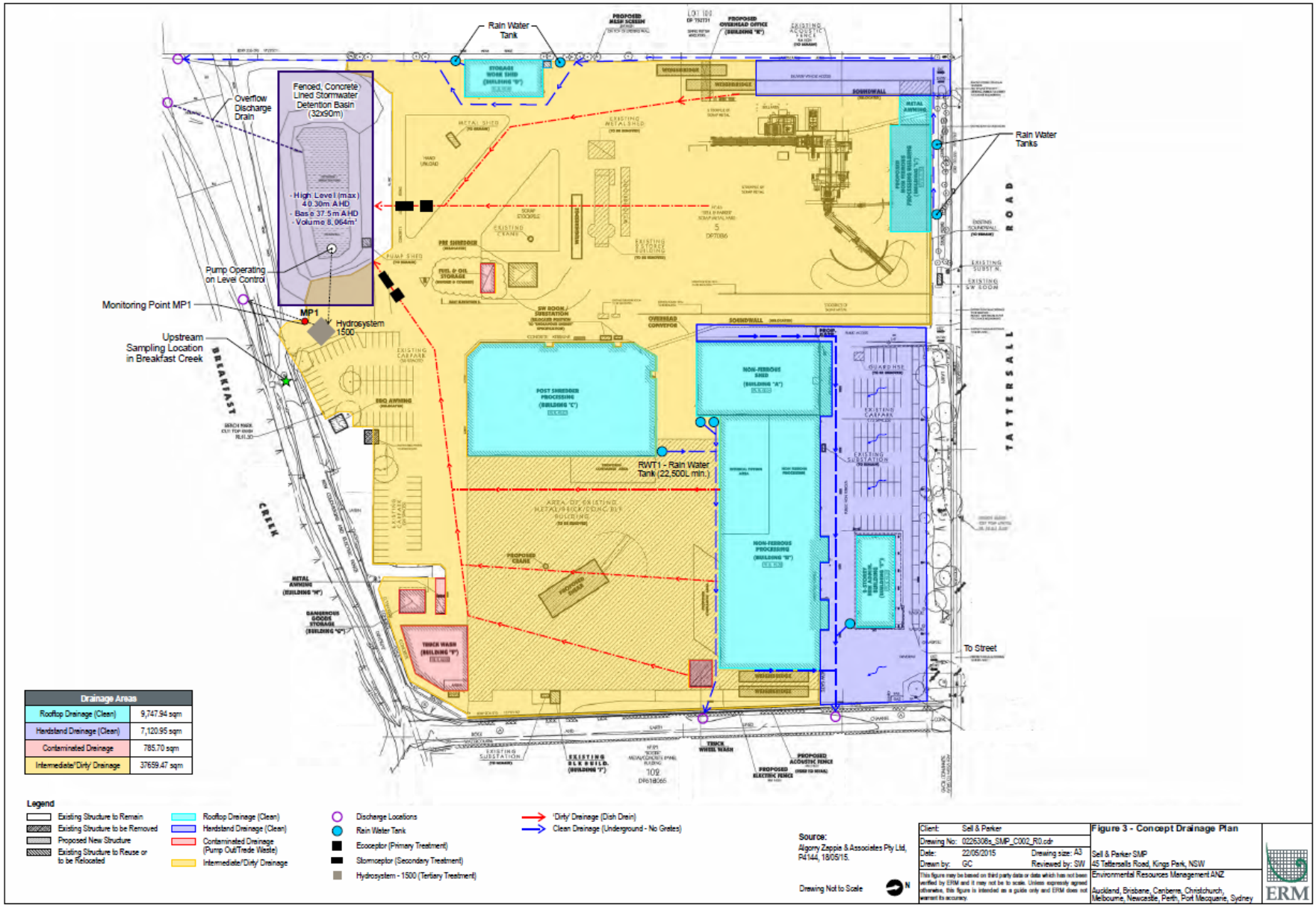
APPENDIX A – SITE AND LAYOUT PLANS


PROPOSED MESH SCREEN
LOT 100 DP 792731
PROPOSED OVERHEAD OFFICE (BUILDING "H")
EXISTING ACOUSTIC FENCE
STORAGE WORK SHED (BUILDING "D")
WEIGHBRIDGE
WEIGHBRIDGE
SOUNDWALL
METAL AWNING
METAL SHED
EXISTING METAL SHED
HAND UNLOAD
EXISTING CRANE
SCRAP STOCKPILE
EXISTING 2 STOREY BUILDING
5 DP7086
PROPOSED NON FERROUS PROCESSING (BUILDING "C")
PUMP SHED
PBS SHREDDER
SW ROOM / SUBSTATION
OVERHEAD CONVEYOR
SOUNDWALL
EXISTING SOUNDWALL
EXISTING SUBST'N
EXISTING SW ROOM
TATTERSALL ROAD
PROP. GATE
EXISTING CARPARK
BREAKFAST
BBQ AWNING
POST SHREDDER PROCESSING (BUILDING "C")
NON-FERROUS SHED (BUILDING "A")
GUARD HSE
EXISTING CARPARK
EXISTING SUBSTATION
PROPOSED RAIN GARDEN
CREEK
AREA OF EXISTING METAL/BRICK/CONC BLK BUILDING TO BE REMOVED
PROPOSED CRUSH
NON-FERROUS PROCESSING (BUILDING "B")
METAL AWNING (BUILDING "H")
DANGEROUS GOODS STORAGE (BUILDING "G")
TRUCK WASH (BUILDING "F")
WEIGHBRIDGE
WEIGHBRIDGE
EXISTING SUBSTATION
EXISTING BLK BUILD. (BUILDING "I")
N°91 "ROOTER" METAL/CONCRETE/PANEL BUILDING
102 DP618065
TRUCK WHEEL WASH
PROPOSED ACOUSTIC FENCE
PROPOSED ELECTRIC FENCE
SITE PLAN
DEVELOPMENT DATA
SITE AREA 59 475 M2 approx.
FLOOR AREAS
WAREHOUSE
OFFICE /AMEN
BUILD "A" 1278 M2 94 M2
BUILD "B" 3169 M2 438 M2
BUILD "C" 9981 M2 ——
BUILD "D" 415 M2 ——
BUILD "E" 984 M2 ——
BUILD "F" 494 M2 ——
BUILD "G" 81 M2 ——
BUILD "H" 85 M2 ——
BUILD "I" 17 M2 ——
BUILD "K" 47 M2 ——
BUILD "L" 593 M2 ——
TOTAL 18 077 M2 666 M2
CARPARKING REQUIRED
TOTAL GR FLR AREA / 75 = 18077 / 75 = 135
TOTAL OFFICE AREA / 40 = 445 / 40 = 11
TOTAL = 152
PROVIDED = 147
LEGEND
EXISTING STRUCTURE TO REMAIN
EXISTING STRUCTURE TO BE REMOVED
PROPOSED NEW STRUCTURE
EXISTING STRUCTURE TO BE FOR BUILDING OR TO BE BLOCKED
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
Consulting Civil & Structural Engineers & Building Designers
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
P4144
DEVELOPMENT APPLICATION
SITE PLAN
DA
1049-13
A101
A
BY SHEET


LEGEND
BUILDING "D" STORAGE WORK SHED
EXISTING STORAGE SPACE
BUILDING "C" POST SHREDDER PROCESSING BUILDING
EXISTING STORAGE SPACE
BUILDING "L" PROPOSED NON-FERROUS PROCESSING BUILDING
PROPOSED WAREHOUSE SPACE
OFFICE
47.5 M2
FIRST FLOOR PLAN
GROUND FLOOR PLAN
BUILDING "K" PROPOSED O/H WEIGHBRIDGE OFFICE
1:100
EXISTING GOODS STORE
EXISTING TRUCK WASH
BUILDING "F" TRUCK WASH BUILDING
BUILDING "G,H" DANGEROUS GOODS STORE & AWNING
EXISTING STORAGE SPACE
EXISTING WAREHOUSE SPACE
BUILDING "A" NON-FERROUS SHED
BUILDING "B" NON-FERROUS PROCESSING
FIRST FLOOR PLAN
GROUND FLOOR PLAN
BUILDING "E" ADMIN. BUILDING
FEBRUARY 2014
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
DEVELOPMENT APPLICATION
FLOOR PLANS
P4144
DA
1049-13
A201
A


NORTH ELEVATION 1.
TATTERSALL RD
NORTH ELEVATION 2.
SOUTH ELEVATION 1
BUILDING "D"
BUILDING "C"
BUILDING "B"
BUILDING "A"
BUILDING "E"
BUILDING "L"
PROPOSED "SHADE CLOTH" SCREEN
PROPOSED SOUNWALL
RELOCATED SOUNDWALL
PROPOSED WEIGHBRIDGE
EXISTING SHREDDER
DRIVEWAY
Issue | By | Description | Date
A | CZ | FOR DA | 5/03/14
GENERAL NOTES
Consultants
Date FEBRUARY 2014
Scale 1:200 UNO
Drawn J.IARIA
Checked C.ZAPPIA
Certified
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
Consulting Civil & Structural Engineers & Building Designers
Suite 4, Level 1, 84 Bathurst Street, Liverpool, NSW 2170
P.O. Box 825, Liverpool Business Centre, NSW 1871
Tel: 9602 3133 / 9602 0303 Fax: 9601 6903
E-mail: admin@algorryzappia.com.au
Web: www.algorryzappia.com.au
Project PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45 TATTERSALL RD, KINGS PARK
Client SELL & PARKER METAL
Project No. P4144
Title DEVELOPMENT APPLICATION ELEVATIONS & SECTIONS
Activity Type: DA
Job No.: 1049-13
Sheet No.: A301
Issue: A
B1 SHEET


SOUTH ELEVATION 2
EAST ELEVATION 1
EAST ELEVATION 2
SECTION
THRU BUILDING "L"
PROPOSED
"SHADE CLOTH"
SCREEN
TOP SOUNDWALL RL 49.81
WAREHOUSE SPACE
FFL RL 41.70
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
P4144
DEVELOPMENT APPLICATION
ELEVATIONS & SECTIONS
DA
1049-13
A302
A


Rain Water Tank
Fenced, Concrete Lined Stormwater Detention Basin (32x90m)
Overflow Discharge Drain
- High Level (max) 40.30m AHD
- Base 37.5m AHD
- Volume 8,064m³
Pump Operating on Level Control
Monitoring Point MP1
MP1
Hydrosystem 1500
Upstream Sampling Location in Breakfast Creek
BREAKFAST CREEK
TATTERSALL ROAD
Rain Water Tanks
RWT1 - Rain Water Tank (22,500L min.)
To Street
Drainage Areas
Rooftop Drainage (Clean) 9,747.94 sqm
Hardstand Drainage (Clean) 7,120.95 sqm
Contaminated Drainage 785.70 sqm
Intermediate/'Dirty' Drainage 37659.47 sqm
Legend
Existing Structure to Remain
Existing Structure to be Removed
Proposed New Structure
Existing Structure to Reuse or to be Relocated
Rooftop Drainage (Clean)
Hardstand Drainage (Clean)
Contaminated Drainage (Pump Out/Trade Waste)
Intermediate/'Dirty' Drainage
Discharge Locations
Rain Water Tank
Ecoceptor (Primary Treatment)
Stormceptor (Secondary Treatment)
Hydrosystem - 1500 (Tertiary Treatment)
'Dirty' Drainage (Dish Drain)
Clean Drainage (Underground - No Grates)
Source:
Algorry Zappia & Associates Pty Ltd, P4144, 18/05/15.
Drawing Not to Scale
Client: Sell & Parker
Drawing No: 0226308s_SMP_C002_R0.cdr
Date: 22/05/2015
Drawn by: GC
Drawing size: A3
Reviewed by: SW
Figure 3 - Concept Drainage Plan
Sell & Parker SMP
45 Tattersalls Road, Kings Park, NSW
Environmental Resources Management ANZ
Auckland, Brisbane, Canberra, Christchurch, Melbourne, Newcastle, Perth, Port Macquarie, Sydney
ERM

APPENDIX B – MANAGEMENT AND MITIGATION MEASURES

Table B.1 Summary of Mitigation Measures

Issue	Potential Impact	Mitigation/ Management Measure
Ecology	The overall potential ecological impacts are considered low given the highly disturbed nature of the site. Only landscape trees separating the two current separate sites require removal. Potential impacts to threatened species are considered highly unlikely.	The following recommendations aim to minimise ecological impacts of the proposed works: • sediment control barriers will be installed at the site during construction and while earthworks are undertaken to reduce the likelihood of silted runoff into adjacent Breakfast Creek in the event of high rainfall; • all vehicles are to keep to the existing and proposed access roads on-site at all times; and • all work should be undertaken to prevent the spread of pests and noxious weeds in accordance with the Noxious Weeds Act 1993 and the Noxious and environmental weed control handbook - A guide to weed control in non-crop, aquatic and bushland situations (NSW Government, 2011).
Heritage (Indigenous)	Potential impacts to previously unknown indigenous artefacts or relics during ground disturbance activities.	In accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW NSW, 2010) a conservative approach will be adopted at the site. The following mitigation measures will be implemented: • all staff, contractors and others involved in the construction works would be made aware of the statutory legislation protecting sites and places of heritage significance; and • all works would cease in the immediate area should any indigenous artefacts or relics be uncovered and the Cultural Heritage Division of the NSW National Parks and Wildlife Service (OEH) contacted.
Heritage (Historical)	Potential impacts to previously unknown items of historical significance during ground disturbance.	The following mitigation measures are recommended to ensure that if any historical heritage artefacts are encountered appropriate measures are implemented: • all staff, contractors and others involved in the works would be made aware of the statutory legislation protecting sites and places of heritage significance prior to works commencing; and • in the event that a site or artefact (as defined by the National Parks and Wildlife Act 1974 or Heritage Act 1977) is identified during construction works, works shall cease at the location. The find shall be immediately reported to the regulator in accordance with legislation. No work shall commence in the vicinity of the find until any required approvals have been given by the regulator.
Acoustics	Noise and vibration impacts to nearby commercial premises during construction and operation.	The following acoustic screen fencing is proposed to mitigate noise emissions from site operations to neighbouring existing and proposed new industrial premises: • retain the existing acoustic screen fencing at a height of 4m, which is currently erected around the existing site northern and western boundary and along existing driveways as shown on the site drawings; and • proposed new metal/colorbond and electric fence along the new eastern boundary shall be an acoustic screen fencing of 4m height In addition to the above, the noise screen will be designed with regard to the following: • the extent of noise reduction required of the noise screen as a whole as perceived from any potentially

Issue	Potential Impact	Mitigation/ Management Measure
		affected receiver sites; • any penetrations through the fabric of the noise screen will be sealed air tight; • all joints between noise screen panels will be sealed air tight; and • noise screens will have no clearance gaps underneath them.
Air Quality	Potential localised air quality impacts associated with increased concentrations of TSP at nearby commercial and residential locations.	The following mitigation measures will be implemented to manage potential localised air quality impacts during construction and operation: • vehicles and equipment shall be maintained in accordance with the manufacturer's specifications; • additional site fencing located on the eastern boundary of the site, should include appropriate dust screen to minimise airborne dust movements; and • all surplus soils from excavations during construction, not reused on-site, shall be removed from site by covered trucks and disposed of at an appropriately licensed facility.
Greenhouse Gas	Release of GHG emissions into the atmosphere. Based on the GHG assessment undertaken indicate that GHG emissions associated with the upgrade would represent an increase of 0.006% on Australia's national GHG emissions in 2010/11 of 563.1 Mt CO2-e, which is considered negligible.	Efficiency measures which will be implemented to manage GHG emissions during construction and operation include: • the site will be sealed, which will reduce the emission of GHGs from the mobile materials handling equipment due to a more consistent driving surface and the ability to select more direct routes across the site; • the new site design no longer requires trucks to enter the site twice but allows for one main entrance and exit point, reducing the kilometres travelled by trucks; • the increased throughput allows for efficiencies due to the economy of scale; • additional equipment purchased for the upgrade will conform to the standards of the latest technology including installation of conveyors to move material after processing rather than by FEL or truck; • post-upgrade the site has an additional capacity to recover ferrous and non-ferrous materials from the recycling processes, decreasing the need for end users to source raw materials from the extraction industries; and • where possible, the site will strive to continually improve the energy efficiency of its process and operations by implementing electricity and cost saving measures.

Issue	Potential Impact	Mitigation/ Management Measure
Soil and Water	Potential impacts include: • accidental release/spillage of contaminants and wastewater generated on-site; • earthworks resulting in potential erosional impacts; and • impacts to water balance as a result of the expansion	To manage and control stormwater, the following mitigation measures are proposed: • installation of two oil/water separators for the new drainage system within the existing and expanded site area; • regular cleaning of the oil/water separators should be carried out to maintain performance; • the existing network of underground stormwater pipes, inlets and oil water separators will be cleaned and, if damaged, replaced during the site refurbishment activities; • a bioretention filter will be installed to receive runoff from overland flows and the underground pipe network on the expanded site area; and • the existing stormwater pond on the existing site will be dredged and excavated to remove any contaminated sediments and lined with clay. Verification sampling will be required as will waste classification sampling to allow for the appropriate disposal of any dredged material. The general principles to be applied to erosion control for the disturbed site include: • plan for erosion and sediment control and assess site constraints during the design phase and before any earthworks begin; • minimise the area of soil disturbed and exposed to erosion; • control water flows from the top of and through the project area – divert up-slope 'clean' water away from disturbed areas and ensure concentrated flows are below erosive levels; • rehabilitate disturbed lands quickly; and • maintain erosion and control measures for the duration of the project and until the site is successfully rehabilitated. Key sediment controls include: • protecting stormwater inlets; • constructing a wheel wash; • creating stabilised site access points; • managing stockpiles; and • utilising sediment traps such as sediment fence during construction. Pollution control methods will include: • storage of chemicals within impervious bund of more than 110% of the largest container within the bund; • Material Safety Data Sheets (MSDS) for all chemicals stored on-site and made available to site personnel; • refuelling to occur away from drainage points, with drip trays used and spill kits available; and • trade waste receptacles will be provided for the storage and disposal of all wastes generated on-site.

Issue	Potential Impact	Mitigation/ Management Measure
		To minimise the use of potable water associated with the expansion of the site, the following measures should be implemented: • on-going use of collected runoff in the stormwater basin for operation requirements is recommended, as long as the water is of a quality such that impacts to site infrastructure, the surrounding environment and the health and safety of employees is avoided; • rainwater tanks may also be installed to utilise the runoff from roof spaces and would likely be best suited to providing water for personal use such as toilet flushing, reducing the requirement for mains supplied potable water.; • landscaped areas along the south boundary will include a range of locally endemic species to enhance the portion of the riparian corridor inside the operational boundary of the redeveloped site.
Contaminated Land	Potential risks to human health and the environment resulting from exposure to historical contamination during ground intrusive works.	The following management measures will be employed to manage potential exposure to contaminants during construction and operation: • a contingency for the appropriate management of potential unexpected contamination finds should be incorporated in the Construction Environmental Management Plan (CEMP) for the planned redevelopment of both properties; • if localised contaminated soils are encountered during construction works, they shall be segregated and assessed for waste classification and appropriately disposed of or re-used onsite, subject to the results of testing; • if significant contamination is encountered during construction works, further investigation in the form of a Phase 1/2 Environmental Site Investigation (ESA) may be required; • any imported fill must be certified at source location (e.g. quarry or property owner) as Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) in accordance with the Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment (Waste) Regulation 2005 (POEO Waste Regulation); • 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); and • a Hazardous Materials Register and respective Safety Data Sheets (SDSs) shall be kept on site at all times and regularly maintained. In relation to the management of oil, lubricants and other material during operations hammermill operations, the following management measures will be applied: • vehicles are to be adequately drained prior to coming on the site, if possible, to minimise the requirement for on-site processing. If fluids are present processing must occur prior to recycling the

Issue	Potential Impact	Mitigation/ Management Measure
		vehicle; • immediately after receiving a car on-site it should be confirmed that the fluid containing components have been drained/removed and that no leaks are present. If fluid containing components remain or leaks identified place drip trays and seal leaking pipes; • vehicle processing area is to be bunded to provide additional protection in the event of spills or overflows; • clean up spills within in the bunded area (and across the site more broadly) immediately to prevent interaction with water; • ensure all fluids drained from vehicles are stored in appropriate, labelled containers to avoid the potential for cross contamination; • always use funnels when transferring fluids to limit the potential for spillage; • flock management – if vehicles (and other scrap metals) still contain hydrocarbons or other contaminants there is potential for contamination of the flock. Ensure that it is stored on hardstand, roofed location, with bunding to prevent entry of rainwater and upslope runoff; • remove batteries and battery cable ends (that are often also constructed from lead); • fuel filters to be removed and stored in a leak proof container; • separate other fluids such as brake fluids, coolants, air conditioning fluid, window washing fluid, prior to recycling the vehicle; and • spill kits to be stored and maintained in the car handling location.
Hazards and Risks	Potential off-site impacts include fatality, human injury or damage to property caused from activities undertaken at the site.	• at least one hose reel and one fire extinguisher be provided for the oxygen and LPG cylinder storage (AS 4332-2004, Table 7.2). This is based upon the 3,000 L of oxygen in the store. • provide one powder type extinguisher and one foam extinguisher for all bulk class 3 dangerous goods on site. This includes the storage of fuel and oil removed from vehicles prior to shredding. This recommendation assumes the recovered liquids are stored in intermediate bulk containers. • maintain the height of the floc stockpile to less than 4 m, or the total volume to less than 1000 m3. This ensures the warehouse in which the floc is stored will not be a high hazard occupancy. • continue with the practice of providing water cannons to provide reach to feed and processed stockpiles in the event of a fire in any stockpile.
Fire and Incident	Floc material has been identified as a potential source of fire. Any uncontrolled leaks or spills have the	The recommendations made in regards to fire protection requirements as detailed above will be implemented To ensure incidents such as accidental spills and / or leakages from machinery are contained and managed appropriately, the following measures will be implemented.

Issue	Potential Impact	Mitigation/ Management Measure
	potential to contaminate soils within unsealed sections of the site, or be entrained in stormwater flow to the detention basin at the rear of the site. Overflow of potentially contaminated water from the detention basin, has the potential to detrimentally impact on Breakfast Creek.	• the site will be kerbed to retain spillages or stormwater run-off, which outflow via a detention basin. The detention basin has a capacity of 1440 m3. This basin will be required to be managed in accordance with the measures identified in Section 6.6). • spill kits will be available on-site and be deployed to manage and contain minor spills; • all pollution incidents that threaten or harm the environment shall be reported immediately to relevant authorities in accordance with POEO Act. • It is recommended that a Fire and Incident Response Management Plan, including but not limited to the mitigation measures above, be developed for the expanded site. Sell and Parker have an existing Emergency Response Plan, this may be updated to include the aforementioned information.
Traffic and Transport	Compared against the existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development is considered negligible and is not be expected to compromise the safety or function of the surrounding road network.	• a site-specific construction traffic management plan (CTMP) will be prepared prior to works commencing on-site. This is to outline construction traffic volumes, truck routes, access arrangements and construction worker parking arrangements.
Social and Economic Resources	The proposed development presents an overall positive impact to the local community in terms of employment opportunities and indirect contributions to the local community.	The following measures should be implemented to ensure positive socio-economic impacts of the proposed developed are maximised: • seek to utilise local available labour force when recruiting for additional employees, including where possible those that have been affected by job losses at the Dexion site; • where possible, investigate opportunities for offering apprenticeships for new work force and offer additional training to current workforce; • communicate to local business and community the expected start date of construction; and • any complaints received relating to site operations are to be recorded and attended to promptly.
Visual Amenity	The proposed development will not result in significant visual impacts in the vicinity of the site or neighbouring areas	Whilst visual amenity impacts associated with the proposed development are considered negligible the following management measure will be implemented: • native trees, shrubs and grass species will be planted along site boundaries, particularly the frontage with Tattersall Road, which will complement and enhance existing landscaped vegetation in accordance with the Landscape Concept Plan provided in Annex M.
Waste Management	Potential impacts include: • excessive waste being directed to	• all waste transported to and removed from the site should be done so in accordance with road and transportation legislation;

Issue	Potential Impact	Mitigation/ Management Measure

	landfill;
	• various types of waste being generated and stored onsite, with the potential for misclassification;
	• contaminated waste not being correctly stored or disposed;
	• off-site impacts to soil and/or water and/or groundwater.
		• in all cases, appropriately licenced transport contractors are to be engaged to transport waste material to and from the site. The contractors appointed to transport waste are to ensure they:
		  • are licenced to transport the type of waste they receive;
		  • transport the waste to a licenced facility capable of receiving the type of waste and quantity they are carrying;
		  • waste is adequately covered during transport; and
		  • the contractor transporting the waste is to ensure that completed waste data forms are provided to the waste facility upon arrival
		• the designated site manager or an 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 DECCW (2009) *Waste Classification Guidelines;*
		  • a review of licences held by the facilities where waste has been disposed to assess/ ensure their ability to accept the waste in accordance with relevant legislation; and
		  • include any incident reports relating to waste (i.e. spills) which have occurred over that month. Any corrective actions undertaken should also be included.
		• 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 in accordance with the classification of the waste material at an approved licenced facility.

APPENDIX D MOD 1

Land and Environment Court
New South Wales

Medium Neutral Citation:	**Sell & Parker Pty Ltd v Minister for Planning [2017] NSWLEC 1586**
Hearing dates:	Conciliation conference on 19 September & 17 October 2017
Date of orders:	19 October 2017
Decision date:	19 October 2017
Jurisdiction:	Class 1
Before:	Maston AC
Decision:	See (4) below
Catchwords:	DEVELOPMENT APPLICATION: conciliation conference; agreement between the parties; orders
Legislation Cited:	Land and Environment Court Act 1979
Category:	Principal judgment
Parties:	Sell and Parker Pty Ltd (ACN 000 101 315) (Applicant) Minister for Planning (Respondent)
Representation:	Mr J Johnson, Allens(Applicant) Ms L Sims, Department of Planning (Respondent)
File Number(s):	2017/126126
Publication restriction:	No

JUDGMENT

1 **COMMISSIONER**: In this matter, at or after a conciliation conference, an agreement under s 34(3) of the *Land and Environment Court Act 1979* (the Court Act) was reached between the parties as to the terms of a decision in the proceedings that was acceptable to the parties. As the presiding Commissioner, I was satisfied that the decision was one that the Court could have made in the proper exercise of its functions (this being the test applied by s 34(3) of the Court Act). As a consequence, s 34(3)(a) of the Act required me to "dispose of the proceedings in accordance with the decision".

2

The Court Act also required me to "set out in writing the terms of the decision" (s 34(3)(b)). The orders made to give effect to the agreement constitute that document.

3 In making the orders to give effect to the agreement between the parties, I was not required to make, and have not made, any merit assessment of the issues that were originally in dispute between the parties.

4 The final orders to give effect to the parties' agreement under s34(3) of the Land and Environment Court Act 1979 are:

(1) Leave is granted to the Applicant to rely on the following amended plans and documents:

Document	**Revision Date**	**Prepared by: (consultant)**
Drawing DA-1049-14 A101 Rev M	21/9/2017	Algorry Zappia and Associates Pty Ltd
Drawing DA-1049-14 A301 Rev H	27/9/2017	Algorry Zappia and Associates Pty Ltd
Drawing 14023-16-001-FH-01 Rev P4	25/9/2017	MJ Harvey and Associates Pty Ltd
Drawing SS15-3178-000-I	22/9/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-101-J	22/9/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-401-G	15/8/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-402-I	22/9/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-403-G	15/8/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-404-G	22/9/2017	Site Image (NSW) Pty Ltd
Drawing SS15-3178-501-I	22/9/2017	Site Image (NSW) Pty Ltd
Town Planning Report	29/9/2017	Tim Ward (Ethos Urban)
Acoustic Report	25/9/2017	Renzo Tonin and Associates

(2) The Applicant is to pay the Respondent's costs thrown away by reason of the amended plans and documents listed above under section 97B of the *Environmental Planning and Assessment Act 1979* as agreed or assessed.

(3) The appeal is upheld.

(4) Modification application No. SSDMod 16_8001, is approved, subject to the conditions set out in Annexure "A".

.....

John Maston

Acting Commissioner of the Land & Environment Court of NSW

Annexure A (75.7 KB, pdf)

Plans (8.24 MB, pdf)

Decision last updated: 03 November 2017

ANNEXURE A

Sell and Parker Pty Limited v Minister for Planning

SCHEDULE 1

Application No:	SSD 5041
Applicant:	Sell and Parker Pty Ltd
Consent Authority:	Land and Environment Court of NSW
Development:	Increasing the processing capacity of the existing metal recycling facility, including reconfiguration and expansion of the facility into the adjoining site at 23-43 Tatersall Road, Kings Park.
Date of Original Consent:	12 November 2015
Modification:	SSD 5041 MOD 1- the modification includes amendments to the site layout, design of buildings and structures and alterations and additions to existing buildings and structures

SCHEDULE 2

This consent is modified as follows:

In Schedule 1

1. In the table of definitions, insert the following definitions in alphabetical order:

Expanded Operations	The point at which the site receives or processes in excess of 90,000 tonnes per calendar year of waste
FRNSW	Fire and Rescue New South Wales
NCC	National Construction Code
Waste	As defined in the POEO Act In Schedule 2

2. Delete and replace Condition A2 as follows:

A2. The Applicant shall carry out the Development in accordance with the:

(a) EIS prepared by ERM dated July 2014;

(b) Response to Submissions report prepared by ERM dated 7 January 2015;

(c) Supplementary Response to Submissions prepared by Mecone dated 30 June 2015;

(d) Supplementary Response to Submissions prepared by Sell and Parker Pty Ltd dated 3 September 2015;

(e) Site layout plans and drawings (See Appendix A);

(f) Management and Mitigation Measures (see Appendix B);

(g) Modification Application SSD 5041 MOD ·1 and accompanying document titled *Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park* dated August 2016 prepared by Higgins Planning, additional information from Higgins Planning dated 22 December 2016, further additional information from Allens and Linklaters dated 9 February 2017 and the Town Planning Report prepared by Ethos Consulting on 29 September 2017.

3. Insert Condition B35A as follows:

B35A. Prior to:

(i) expanded operations;

(ii) the issue of an Occupation Certificate; or

(iii) the date being 6 months after the determination of MOD 1 by the Land and Environment Court,

(whichever is sooner), the Applicant must ensure that an appropriate sprinkler system and smoke detection system have been installed within the floc storage area in Building C to the satisfaction of FRNSW.

4. Insert Condition E35B as follows: B35B

Prior to:

(i) expanded operations;

(ii) the issue of an Occupation Certificate; or

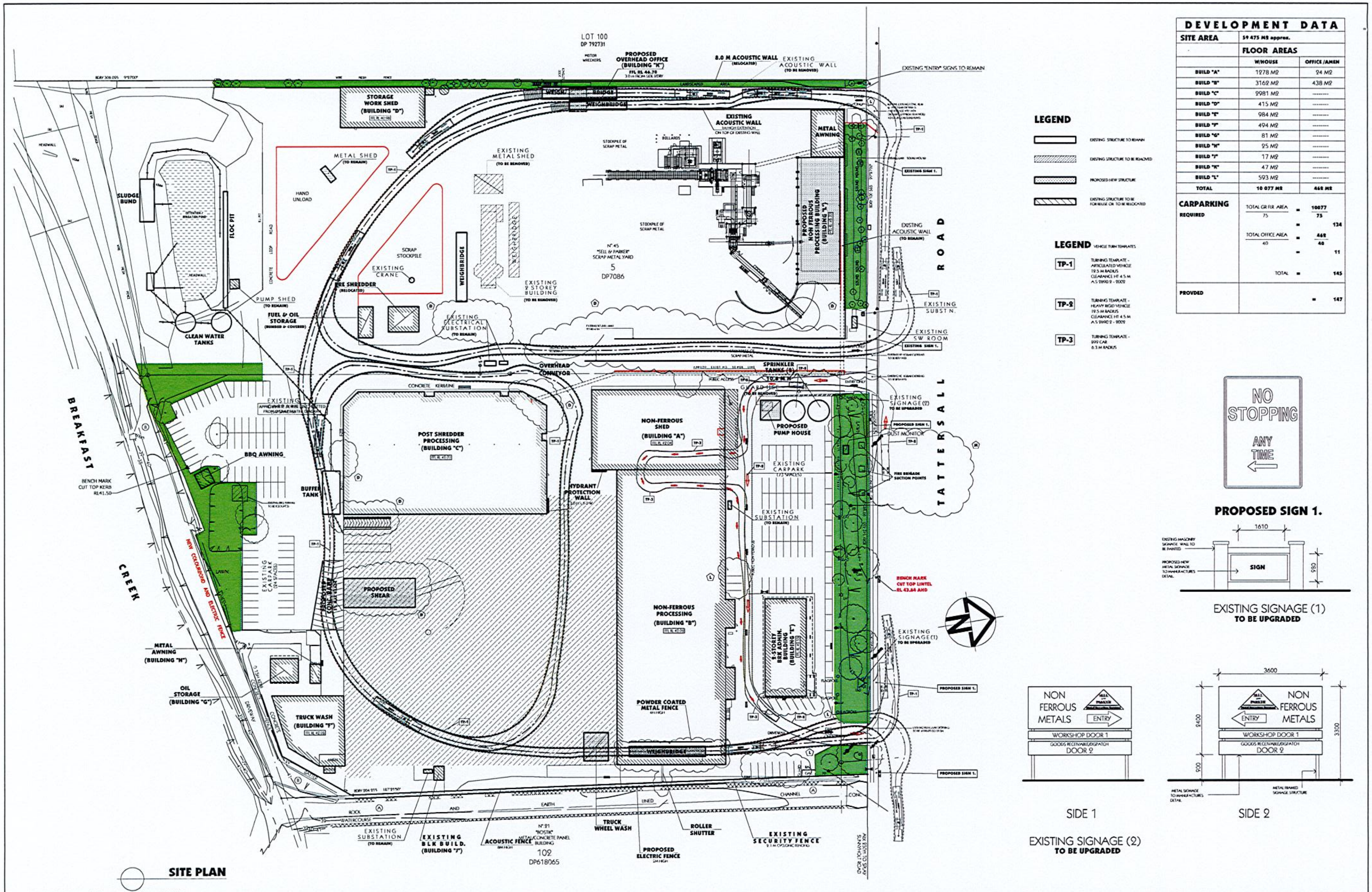
(iii) the date being 7 months after the determination of MOD 1 by the Land and Environment Court,

(whichever is sooner), the Applicant must ensure that all fire safety measures required by the NCC for Buildings A, B, & C (as shown on drawing 14023-16-001-FH-01 Rev P4) have been installed and verified through a Fire Safety Audit in accordance with Australian Standard 4655 – Fire Safety Audits, to the satisfaction of FRNSW.

5. Delete Condition B19(viii) and replace as follows:

(viii) installation of appropriate dust screens at the property boundary and replacement of dust screens arid shade cloths at the Tattersall Road boundary of the 45 Tattersall Road site.

6. Replace all drawings in Appendix A with the following:



DEVELOPMENT DATA

SITE AREA	59 475 M2 approx.	
	FLOOR AREAS	
	W/HOUSE	OFFICE /AMEN
BUILD "A"	1278 M2	24 M2
BUILD "B"	3162 M2	438 M2
BUILD "C"	2981 M2	-------
BUILD "D"	415 M2	-------
BUILD "E"	984 M2	-------
BUILD "F"	494 M2	-------
BUILD "G"	81 M2	-------
BUILD "H"	25 M2	-------
BUILD "J"	17 M2	-------
BUILD "K"	47 M2	-------
BUILD "L"	593 M2	-------
TOTAL	10 077 M2	462 M2
CARPARKING REQUIRED	TOTAL GR FLR AREA 75 = 10077/75 = 134; TOTAL OFFICE AREA 40 = 462/40 = 11; TOTAL = 145	
PROVIDED	= 147	

M CZ FOR SECTION 96 APPLICATION 27/09/17

Issue	By	Description	Date
A	CZ	FOR DA	5/03/14
B	CZ	FOR DA	18/05/15
C	CZ	FOR SECTION 96 APPLICATION	05/07/16
D	CZ	FOR SECTION 96 APPLICATION	20/07/16
E	CZ	FOR SECTION 96 APPLICATION-ADDED VEHICLE TEM.	19/08/16
F	CZ	FOR SECTION 96 APPLICATION	15/11/16
G	CZ	FOR SECTION 96 APPLICATION	16/12/16
H	CZ	FOR SECTION 96 APPLICATION	19/12/16
J	CZ	FOR SECTION 96 APPLICATION	27/01/17
K	CZ	FOR SECTION 96 APPLICATION	24/08/17
L	CZ	FOR SECTION 96 APPLICATION	21/09/17

GENERAL NOTES

1) All dimensions and floor areas are to be verified by the Builder prior to the commencement of any building work. Any discrepancies are to be brought to the attention of the designer.
2) Levels shown are approximate unless accompanied by reduced levels.
3) Figured dimensions must be taken in preference to scaling.
4) All boundary clearances must be verified by the surveyor prior to the commencement of any building works.
5) Where engineering drawings are required such must take preference to this drawing.
6) Stormwater to be discharged to Councils' requirements and AS 3500.3-1990.
7) All services to be located and verified by the Builder with relevant authorities before any building work commences.

Consultants

Date	FEBRUARY 2014
Scale	1:500 UNO
Drawn	J.LARA
Checked	C.ZAPPIA
Certified	

ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
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Tel: 9602 3133 / 9602 0303 Fax: 9601 6903
E-mail: admin@algorryzappia.com.au
Web: www.algorryzappia.com.au

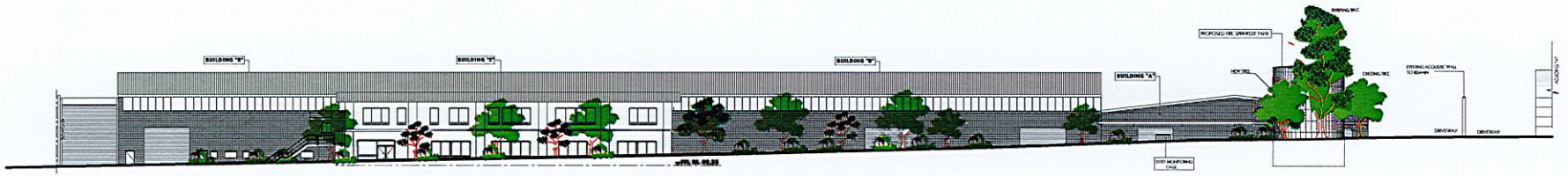
Project: PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE LOT 2 DP550522 & LOT 5 DP7086, No 23 & 45 TATTERSALL RD, KINGS PARK

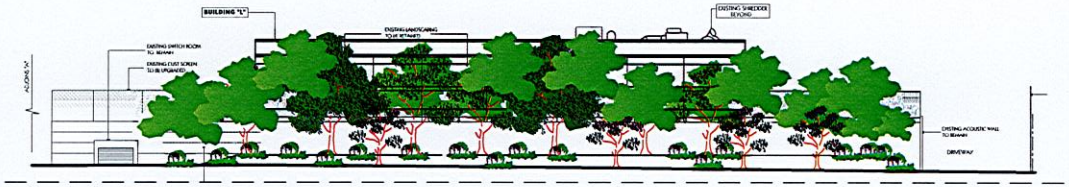
Client: SELL & PARKER METAL

Title: DEVELOPMENT APPLICATION SITE PLAN

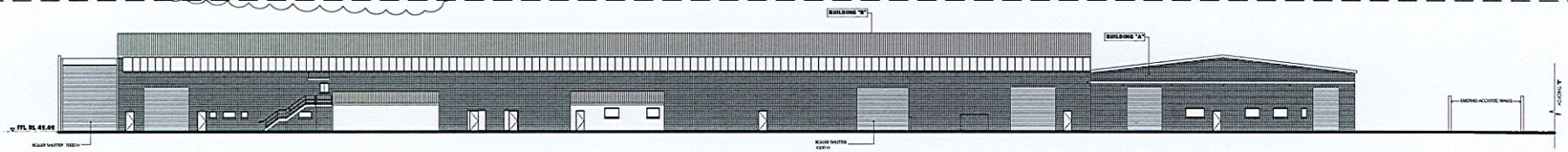
Project No. P4144 | Activity Type: DA | Job No. 1049-14 | Sheet No. A101 | Issue M

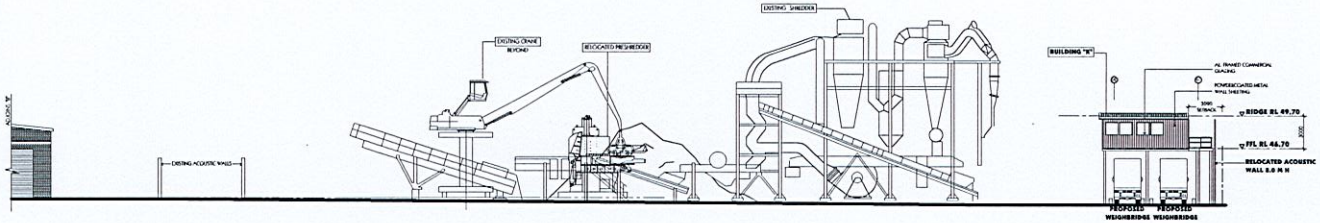
B1 SHEET



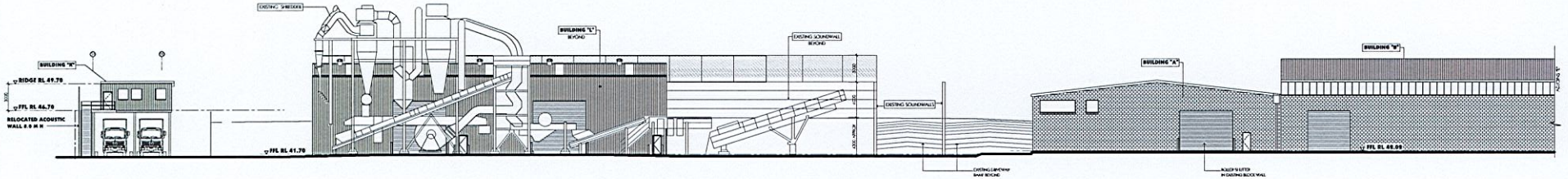


NORTH ELEVATION 1. (MATURE ELEVATION) H
TATTERSALL RD

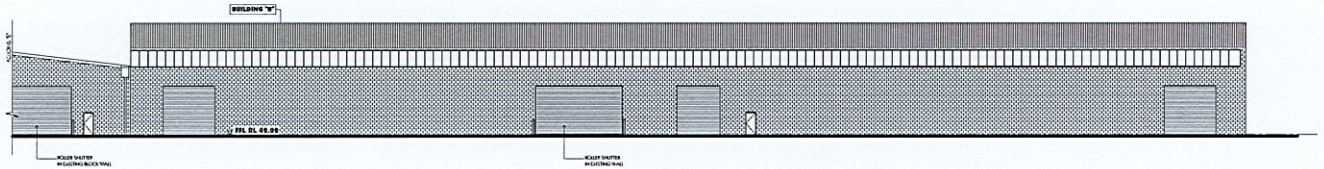




NORTH ELEVATION 2.



SOUTH ELEVATION 1



Issue	By	Description	Date
A	CZ	FOR DA	05/03/14
B	CZ	FOR SECTION 96 APPLICATION	05/07/16
C	CZ	FOR SECTION 96 APPLICATION	20/07/16
D	CZ	FOR SECTION 96 APPLICATION	16/19/16
E	CZ	FOR SECTION 96 APPLICATION	27/01/17
F	CZ	FOR SECTION 96 APPLICATION	13/09/17
G	CZ	FOR SECTION 96 APPLICATION	21/09/17
H	CZ	FOR SECTION 96 APPLICATION	27/09/17

GENERAL NOTES

1) All dimensions and floor areas are to be verified by the Builder prior to the commencement of any building work. Any discrepancies are to be brought to the attention of the designer.
2) Levels shown are approximate unless accompanied by reduced levels.
3) Figured dimensions must be taken in preference to scaling.
4) All boundary dimensions must be verified by the surveyor prior to the commencement of any building works.
5) Where engineering drawings are required such must take preference to this drawing.
6) Stormwater to be discharged to Council's requirements and AS 3500.3–1990.
7) All services to be located and verified by the Builder with relevant authorities before any building work commences.

Consultants

Date	FEBRUARY 2014
Scale	1:200 UNO
Drawn	J.LABA
Checked	C.ZAPPIA
Certified	

ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
Consulting Civil & Structural Engineers & Building Designers
Suite 4, Level 1, 64 Bathurst Street, Liverpool, NSW 2170
P.O. Box 895, Liverpool Business Centre, NSW 1671
Tel: (612) 9733 1900 Fax: (612) 9601 4903
E-mail: admin@algorryzappia.com.au
Web: www.algorryzappia.com.au

Project: PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK

Client: SELL & PARKER METAL — Project No.: P4144

Title: BUILDING CERTIFICATE APPLICATION
ELEVATIONS & SECTIONS

Activity Type: DA | Job No.: 1049-14 | Sheet No.: A301 | Issue: H

81 SHEET

LEGEND

- 36mtr FIRE HOSE REEL
- DOUBLE FIRE HYDRANT
- ISOLATION VALVE IN GROUND
- ISOLATION VALVE ABOVE GROUND
- BOOSTER VALVE
- STREET HYDRANT
- MSB MAIN ELECTRICAL SWITCHBOARD
- DRENCHER CONTROL VALVE SET
- FIRE FIGHTING CANNON
- 150mm FRNSW STORTZ TANK SUCTION OUTLET & BUTTERFLY VALVE
- 4 POINT FRNSW TANK TYPE BOOSTER VALVE

NOTES

1. HEIGHT OF HIGHEST HYDRANT: 0.75 mtrs.
2. FIRE HYDRANT FLOW RATE: 30 l/s.
3. WATER CANNON FLOW RATE: 60l/s.
4. TOTAL FLOW RATE : 110L/S

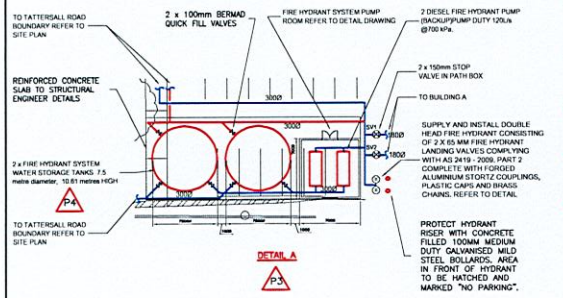
WATER STORAGE CAPACITY IN ACCORDANCE WITH CLAUSE 4.2 OF AS 2419 2005 PART1

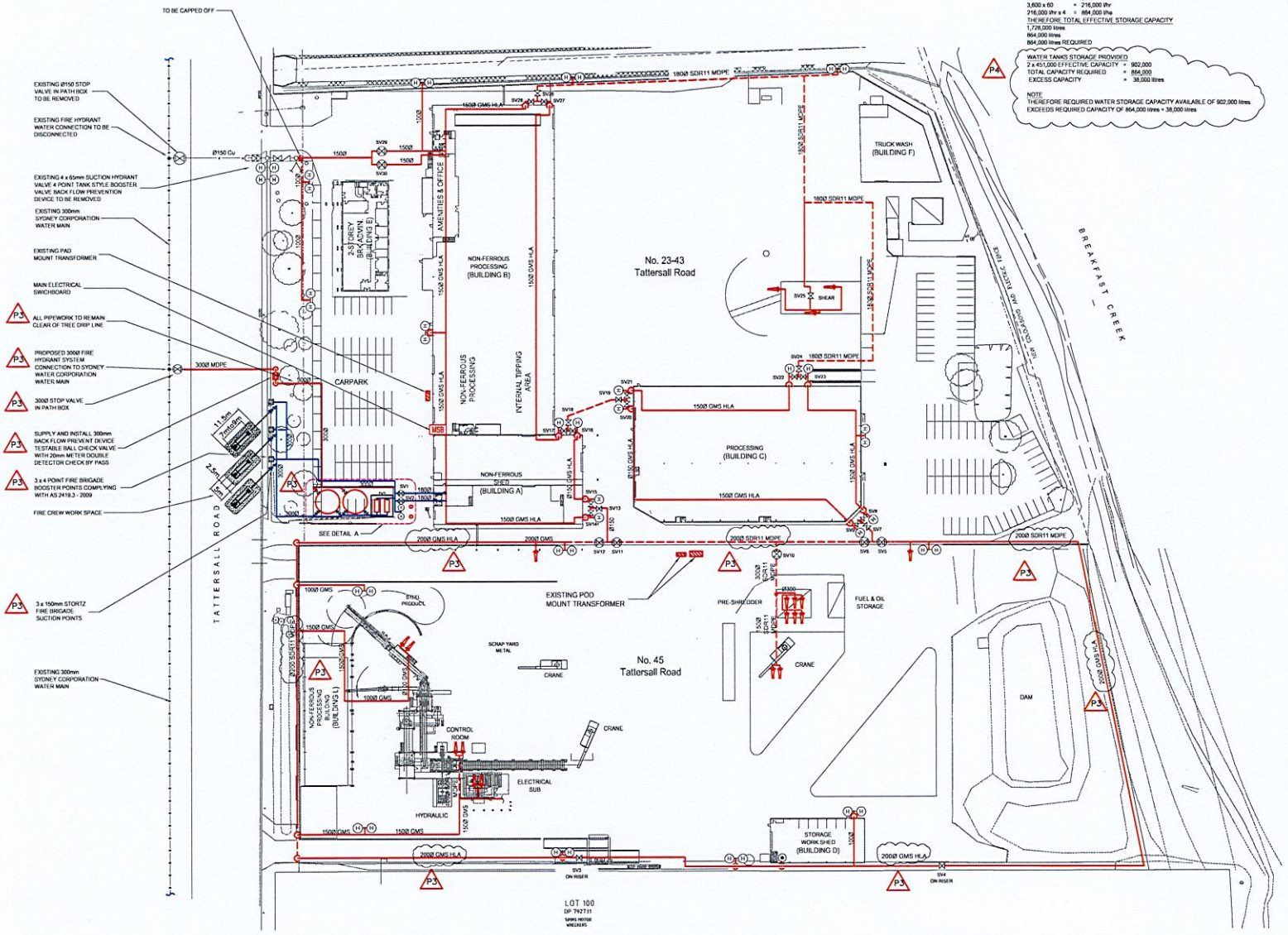
REQUIRED STORAGE
120 l/s x 60 = 7,200 l/m
7200 l/m x 60 = 432,000 l/hr
432,000 l/hr x 4 = 1,728,000 TOTAL STORAGE

INFILL
ALLOWABLE INFILL 60 l/s
60 l/s x 60 = 3,600 l/m
3,600 x 60 = 216,000 l/hr
216,000 l/hr x 4 = 864,000 l/hs
THEREFORE TOTAL EFFECTIVE STORAGE CAPACITY
1,728,000 litres
864,000 litres
864,000 litres REQUIRED

WATER TANKS STORAGE PROVIDED
2 x 451,000 EFFECTIVE CAPACITY = 902,000
TOTAL CAPACITY REQUIRED = 864,000
EXCESS CAPACITY = 38,000 litres

NOTE
THEREFORE REQUIRED WATER STORAGE CAPACITY AVAILABLE OF 902,000 litres EXCEEDS REQUIRED CAPACITY OF 864,000 litres + 38,000 litres





www.dialbeforeyoudig.com.au
DIAL 1100 BEFORE YOU DIG

REV.	DESCRIPTION	REVISED BY		APPROVED BY	
P4	TANKS HEIGHT OF 10.81m WAS 10.16m	F.N.	25.09.17	M.H.	25.09.17
P3	TANKS AND PUMP ROOM RELOCATED GENERAL REVISION	F.N.	21.09.17	M.H.	21.09.17
P2	TANKS ADDED, PIPES BETWEEN SITES CONNECTED	F.N.	06.07.17	M.H.	06.07.17
P1	PRELIMINARY	XX	XX.XX.XX	M.H.	09.05.17

	INITS	DATE
DRAWN	PVM	09.05.17
ORIG. CHECK	M.H.	09.05.17
DESIGN	M.H.	29.03.16
DESIGN CHECK	M.H.	27.06.16
PROJECT MANAGER		
APPROVED		

CLIENT: DEXION SELL & PARKER
23-45 TATTERSALL ROAD
KINGS PARK NSW 2148

MJH
M.J. HARVEY & ASSOCIATES PTY. LTD.
HYDR.ULIC & FIRE PROTECTION ENGINEERS
A.C.N. 067 295 836
UNIT 7, 11-13 POTTER CLOSE, WETHERILL PARK 2164
P.O. BOX 6389, WETHERILL PARK 2164
Phone (02) 9756 5579 Fax (02) 97565841

PROJECT: COMMERCIAL INDUSTRIAL BUILDINGS
23-43 + 45 Tattersall Road,
KINGS PARK NSW 2148

TITLE: COMBINED SITE PLAN
FIRE HYDRANT & WATER CANNON SYSTEMS

DRG.SIZE	SCALE	PROJECT NO.	JOB NO.	REV.	DWG NO.
B1	NTS	14 023	16-001	P4	FH-01

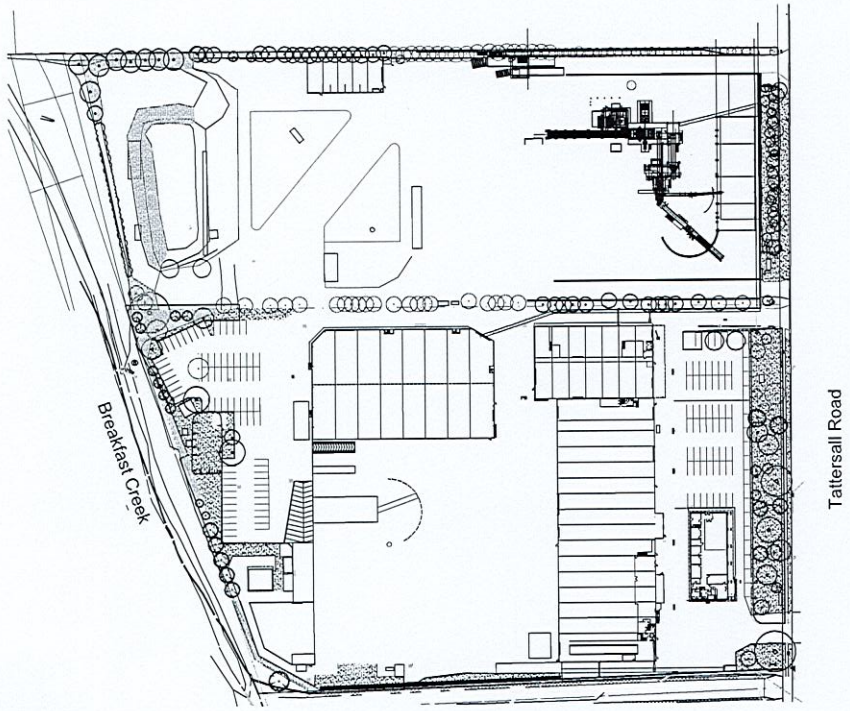
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE

23-43 & 45 TATTERSAL RD, KINGS PARK

LANDSCAPE

DRAWINGS

DWG NO.	DRAWING TITLE	SCALE
000	COVERSHEET	N/A
101	LANDSCAPE MASTERPLAN	1:500
401	LANDSCAPE PLAN	1:250
402	LANDSCAPE PLAN	1:250
403	LANDSCAPE PLAN	1:250
404	LANDSCAPE PLAN	1:250
501	LANDSCAPE DETAILS	AS SHOWN



NOT FOR CONSTRUCTION

A1

Issue	Revision Description	Drawn	Check	Date
I	LEC Amendments	JD	NM	22.09.2017
H	Revised carpark	JD	NM	15.08.2017
G	Revised for Fire Services	JW	NM	13.07.2017
F	Updated boundary/planting	JD	NM	10.11.2016
E	Revised Planting	JD	NM	18.10.2016
D	Construction certificate	SM	NM	04.10.2016
C	Construction certificate	JD	NM	23.03.2016
B	General Revisions	JW	NM	17.03.2016
A	For Comment	JW	NM	12.02.2016

LEGEND

Key Plan:

Client:
Sell and Parker Pty Ltd

Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park

SITE IMAGE
Level 1, 3-5 Baptist Street
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Tel: (61 2) 8332 5600
Fax: (61 2) 9698 2877
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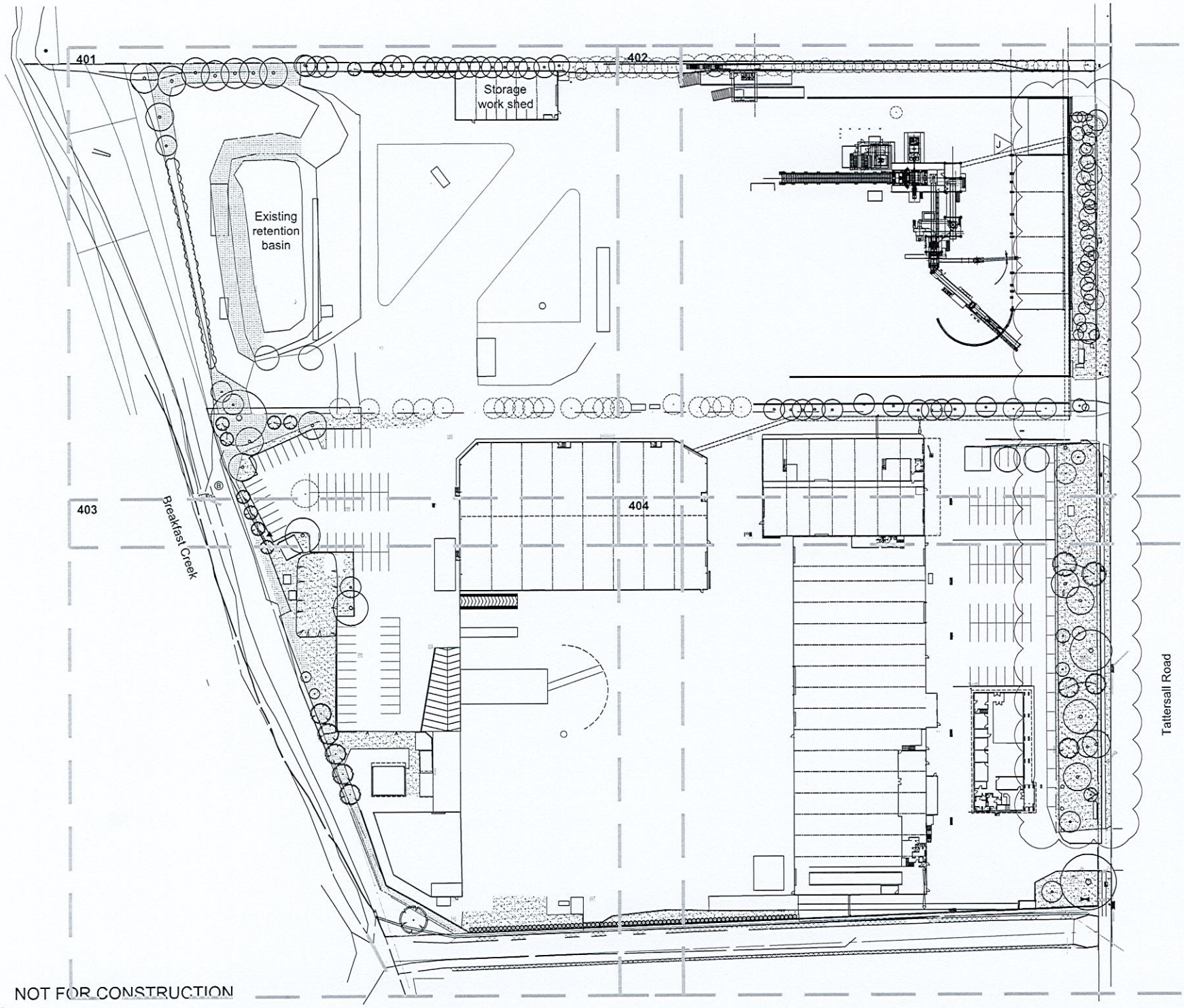
Site Image (NSW) Pty Ltd
ABN 44 801 262 380
Landscape Architects

CONSTRUCTION CERTIFICATE

Drawing Name:
Coversheet

Scale:

Job Number:	Drawing Number:	Issue:
SS15-3178	000	I



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CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Masterplan

Scale: 1:500 @ A1
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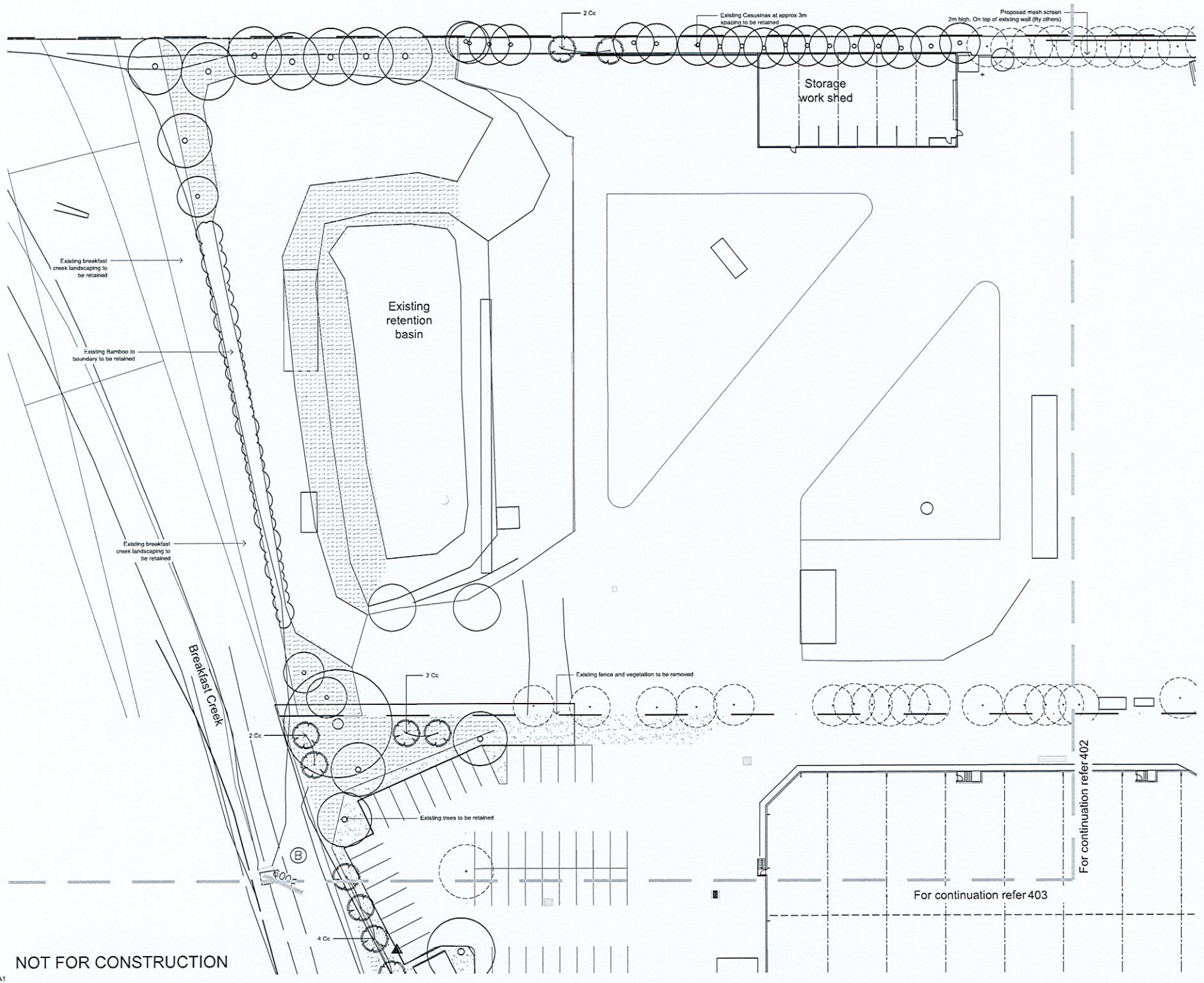
Job Number: SS15-3178
Drawing Number: 101
Issue: J

NOT FOR CONSTRUCTION

A1



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CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Plan

Scale: 1:250 @ A1 (0 2 4 6 10m)

Job Number:	Drawing Number:	Issue:
SS15-3178	401	G

NOT FOR CONSTRUCTION

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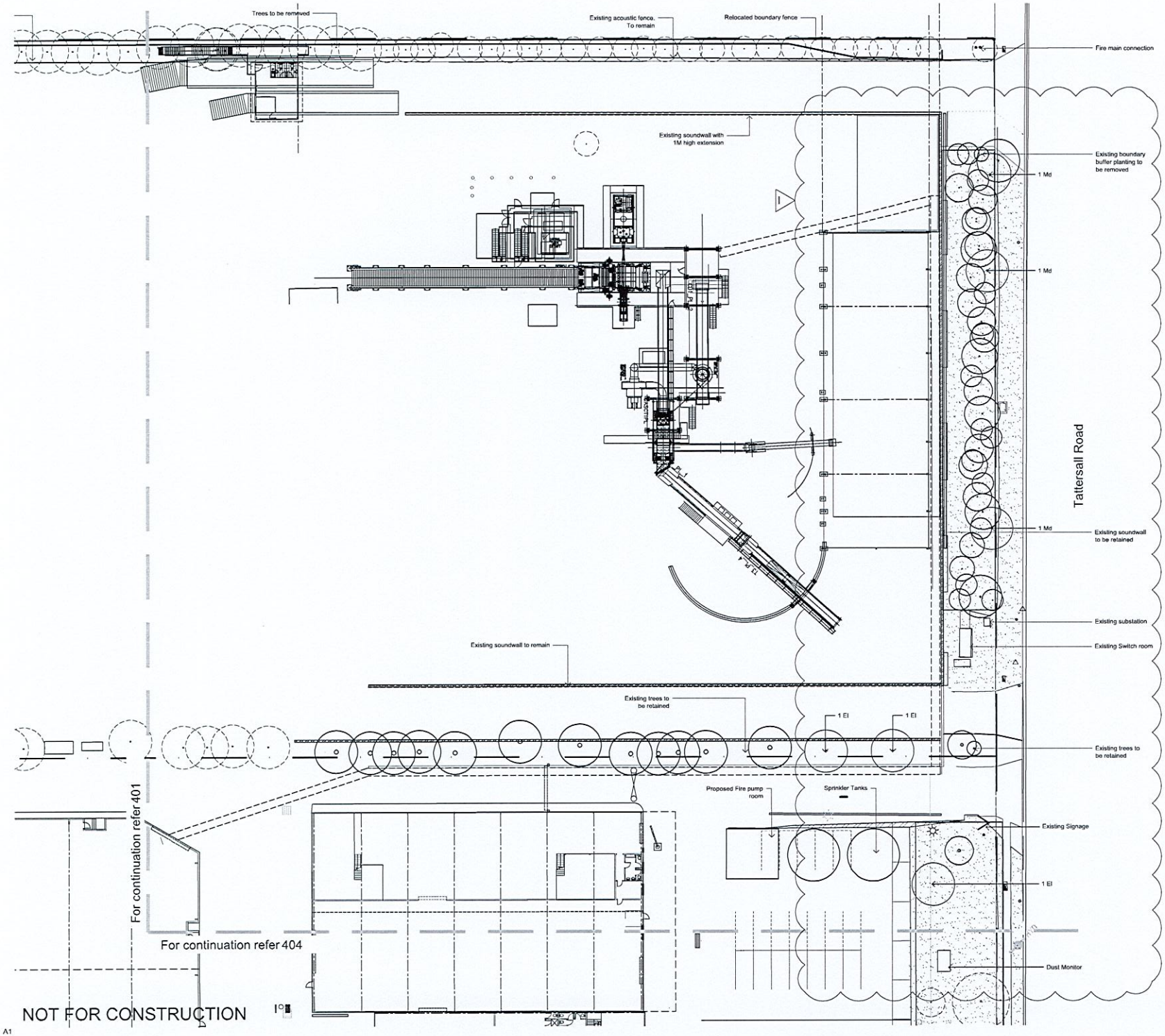

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CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Plan

Scale: 1:250 @ A1
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Job Number: SS15-3178
Drawing Number: 402
Issue: I

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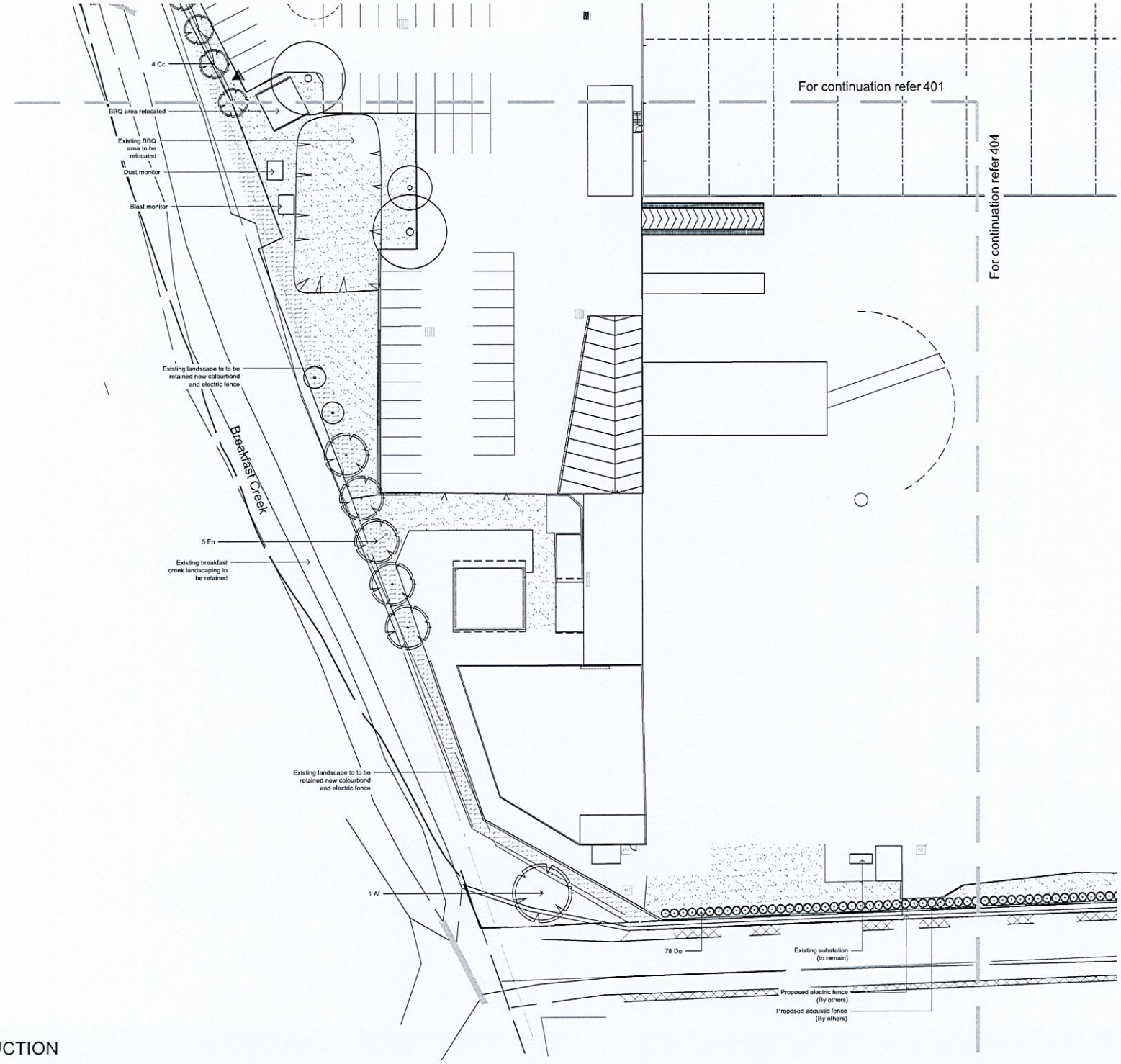

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Drawing Name:
Landscape Plan

Scale: 1:250 @ A1 (0 1 2 4 6 10m)
Job Number: SS15-3178
Drawing Number: 403
Issue: G

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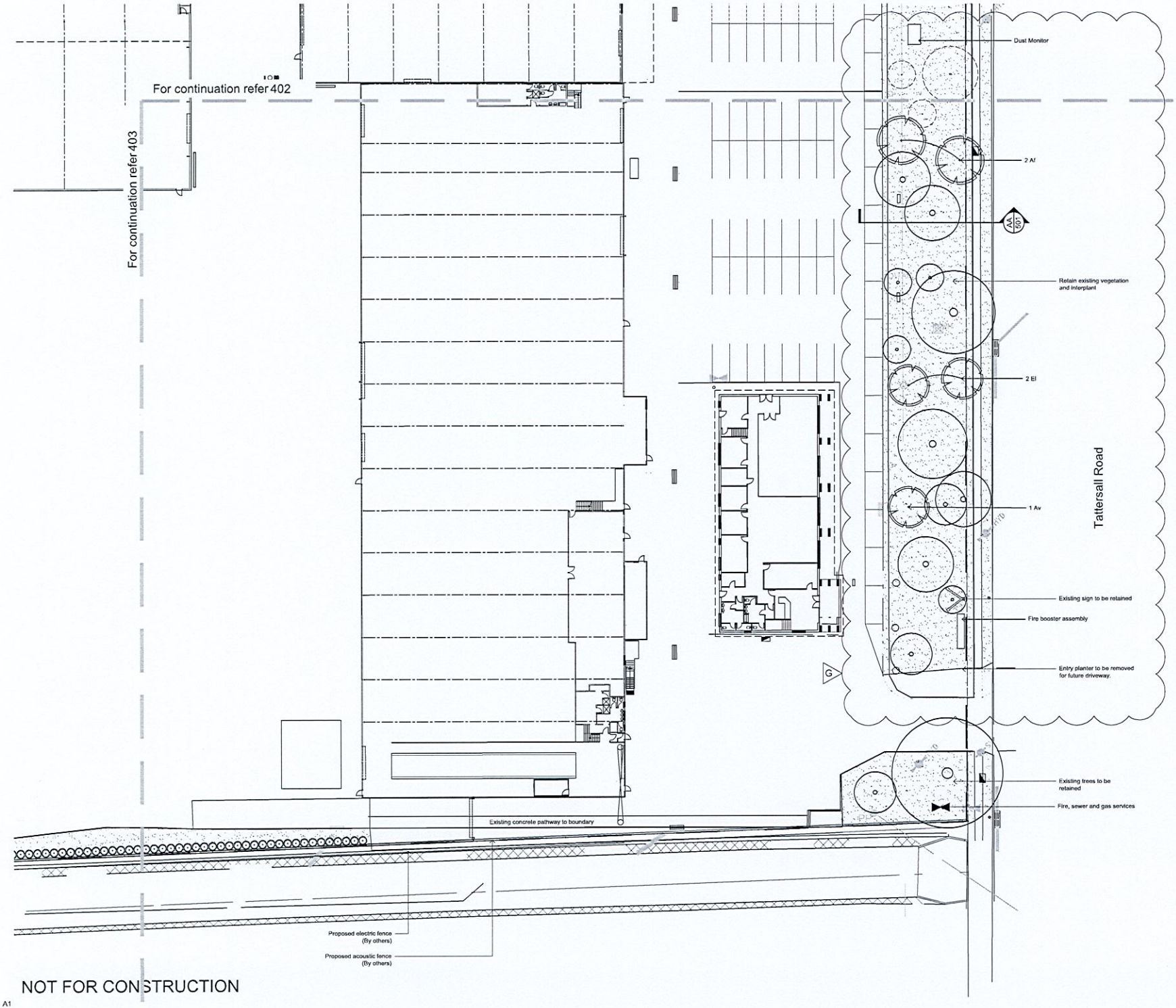
A1



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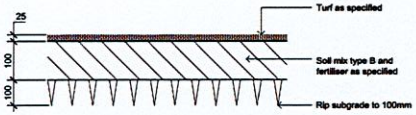
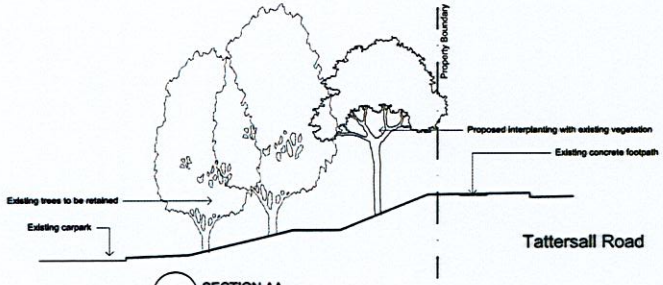
Job Number: SS15-3178

Drawing Number: 404

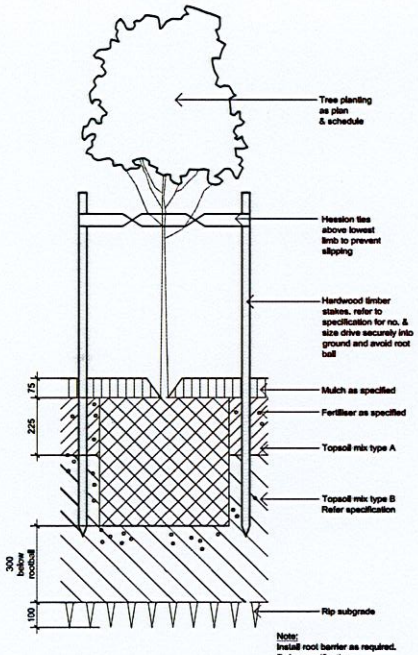
Issue: G



DETAIL -TURF ON EVEN GRADE
1:10



SECTION AA
SCALE 1:100



DETAIL - 75-200L TREE PLANTING ON GRADE
1:10

Symbol	Botanic Name	Common Name	Mature Size (h x w)	Pot Size	Spacing	Qty
	TREES					
Af	*Angophora floribunda*	Rough-Barked Apple	20 x 8	100L	As Shown	3
Av	*Allocasuarina verticillata*	Drooping She-Oak	8 x 7	100L	As Shown	1
Cc	*Casuarina cunninghamiana*	River Sheoak	20 x 6	100L	As Shown	10
Ei	*Eucalyptus leucoxylon 'Eukie Dwarf'*	Eukie Dwarf	7 x 5	100L	As Shown	5
En	*Eucalyptus nicholii*	Willow Peppermint	12 x 9	100L	As Shown	5
Md	*Melaleuca decora*	White Feather Honey Myrtle	6 x 3	100L	As Shown	3
	BAMBOO					
Do	*Dendrocalamopsis oldhamii*	Giant Timber Bamboo	15 x 2	300mm	As Shown	78

Maintenance Schedule

Table	ACTIVITY	FREQUENCY						ACTION
		D	W	2W	3W	M	3or6M	Daily, Weekly, Monthly
1	Logbook	+		+		+		Complete a logbook entry every day at site and at least every two weeks. All actions listed below require a logbook entry. Upon request, make the logbook available for inspection. Submit copies of new entries in the logbook to the Contract Administrator on a monthly basis. Please note that more frequent, short, occasional inspection should result in less maintenance work when problems are observed earlier than they might otherwise have been seen. Maintenance requirements should extend for a minimum of two years after the completion of works or until such time as a minimum 80% survival rate for all plantings and a maximum five percent (5%) weed cover for the treated riparian corridor (controlled activity) is achieved. Maps or diagrams which identify the proposed riparian area, existing vegetation, vegetation to be retained, vegetation to be cleared, footprint of construction activities, areas of proposed revegetation etc should be prepared.
2	Plant replacement			+		+		Inspect and replace failed plants within 2 weeks of observation of failure. Match species, size (original) and location of new with old.
3	Mulch			+		+		Inspect and replace mulch deficiencies within 2 weeks of observation. Prior to placing new mulch aerate the soil by fork turning to a depth of at least 100mm, roughly level the soil and then place mulch. Do not disturb major plant roots while aerating soil. It can be expected that mulch will have significantly broken-down after an estimated 12-month period following initial application. It is therefore recommended that all mulch beds are topped-up with a 50mm layer of woodchip/leaf mulch (Compliant with AS 4454) at this stage. This should be accompanied by a topdressing application of a 9-month, slow release, low phosphorous fertiliser to ensure that semi-established plantings do not suffer as a result of potential nitrogen draw-down that may be associated with the application of the 50mm mulch layer at the 12-month period.
4	Erosion control			+				Inspect every two weeks and repair ground, soil and mulch immediately. Maintain erosion control device as necessary. Silt fencing installed for sediment control purposes to the east of the tributary. Silt fencing should be regularly inspected and repaired or reinstalled as necessary.
5	Stakes and ties			+				Inspect every two weeks, adjust and/or replace as necessary but remove as plants mature and are able to support themselves.
6	Weed and rubbish removal			+				Inspect and remove immediately upon observation. Leave no waste on site. Dispose of waste material at a designated waste disposal site. All herbaceous weeds should be managed to be at very-low percentage cover levels, (as a minimum), or better. Pasture grasses should be prevented from spreading into any bushland zones by applying a spot glyphosate herbicide spray application on the 1-metre wide buffer zone, on a monthly basis or as required. Maintenance weeding for a period of 24 months after the completion of primary works with an increase in maintenance hours occurring throughout the warmer growing months.
7	Pruning			+				Inspect every 2 weeks and prune as necessary to remove dead wood, improve plant shape and promote healthy vigorous new growth.
8	Spraying			+				Inspect every 2 weeks and action as necessary. Do not spray if other non-chemical methods will satisfy the need to remove insects. Spray for disease control only when absolutely necessary.
9	Urgent works		+					Complete within 1 week (7 days) of notification. Inspect and clear drains.
10	Planting and fertilising			+			3m+	Inspect every 2 weeks and remove spent flowers and dead stalks as they become apparent. Fertilise gardens every 3 months or other frequency in accordance with fertiliser manufacturer's directions.
11	Watering	+		+				Water when and where necessary every day at site and at least every 2 weeks generally. Do not allow soil and plants to dehydrate. Allow for prolonged rain, windy and dry periods. Water in the early morning or late afternoon to avoid excessive evaporation during the heat of the day.
12	Mowing, top-dressing and edging			+		+	6m+	Summer fortnightly. Winter monthly. Top-dress 6 monthly.

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CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Details

Scale: 1:250 @ A1
0 1 2 4 6 10m

Job Number: SS15-3178
Drawing Number: 501
Issue: I

NOT FOR CONSTRUCTION

A1

APPENDIX E MOD 2

Modification of Development Consent

Section 96(1A) of the *Environmental Planning and Assessment Act 1979*

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

Chris Ritchie
Director
Industry Assessments

Sydney 26 FEBRUARY 2018 File: EF18/663

SCHEDULE 1

Application No:	SSD 5041
Applicant:	Sell and Parker Pty Ltd
Consent Authority:	Minister for Planning
Development:	Increasing the processing capacity of the existing metal recycling facility, including reconfiguration and expansion of the facility into the adjoining site at 23-43 Tattersall Road, Kings Park.
Date of Original Consent:	12 November 2015
Modification:	SSD 5041 MOD 2 – minor amendments to the western acoustic wall, entry weighbridge arrangements and alterations and additions to existing buildings and structures.

SCHEDULE 2

This consent is modified as follows:

In Schedule 2

1. Delete Condition A2 and replace with the following:

   A2. The Applicant shall carry out the Development in accordance with the:
   (a) EIS prepared by ERM dated July 2014;
   (b) Response to Submissions report prepared by ERM dated 7 January 2015;
   (c) Supplementary Response to Submissions prepared by Mecone dated 30 June 2015;
   (d) Supplementary Response to Submissions prepared by Sell and Parker Pty Ltd dated 3 September 2015;
   (e) Site layout plans and drawings (See Appendix A);
   (f) Management and Mitigation Measures (see Appendix B);
   (g) Modification Application SSD 5041 MOD 1 and accompanying document titled *Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park* dated August 2016 prepared by Higgins Planning, additional information from Higgins Planning dated 22 December 2016 and further additional information from Allens and Linklaters dated 9 February 2017; and
   (h) Modification Application SSD 5041 MOD 2 and accompanying document titled *Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park* dated December 2017 prepared by Higgins Planning.

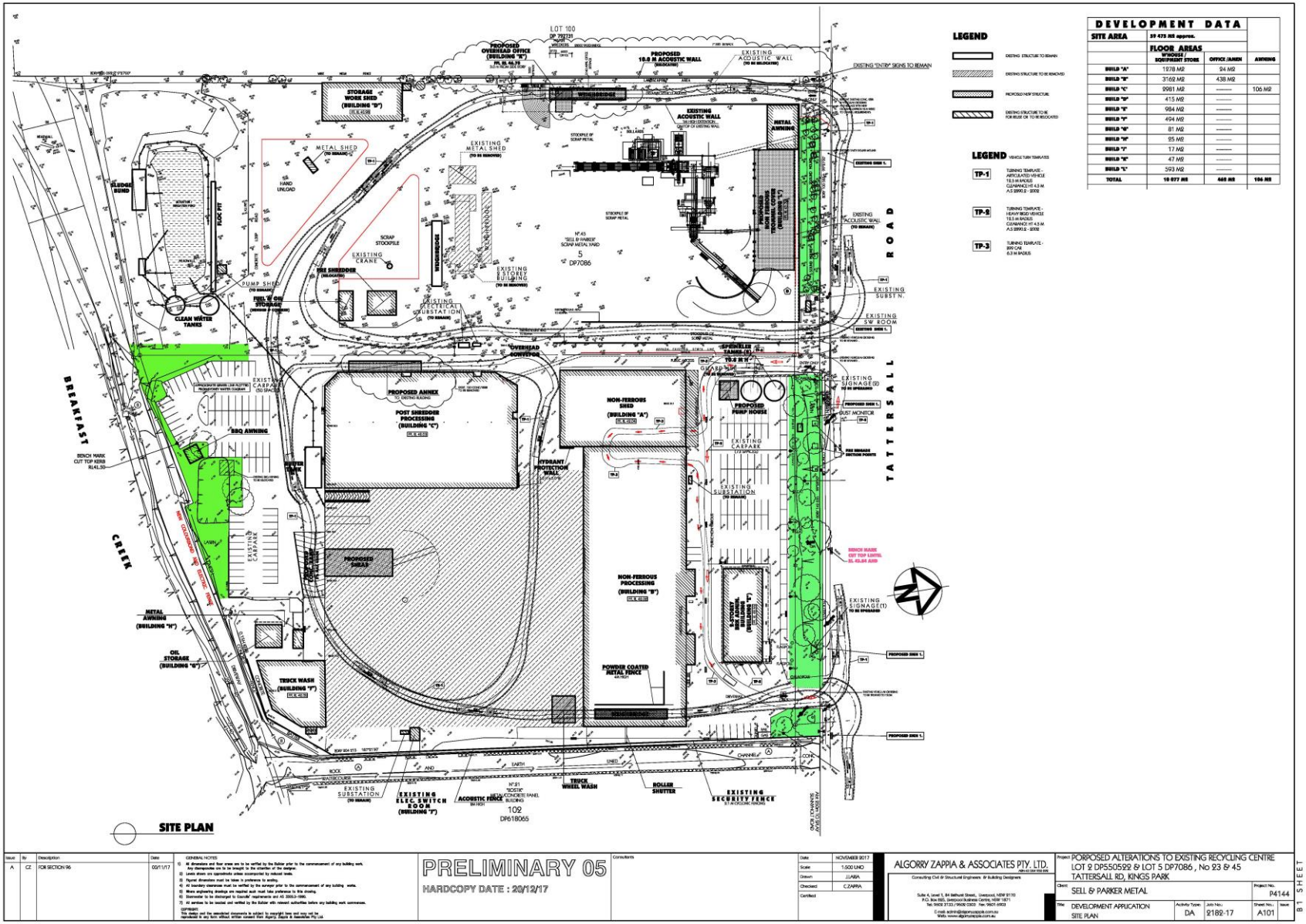
2. Insert new Condition B35C immediately after Condition B35B as follows:

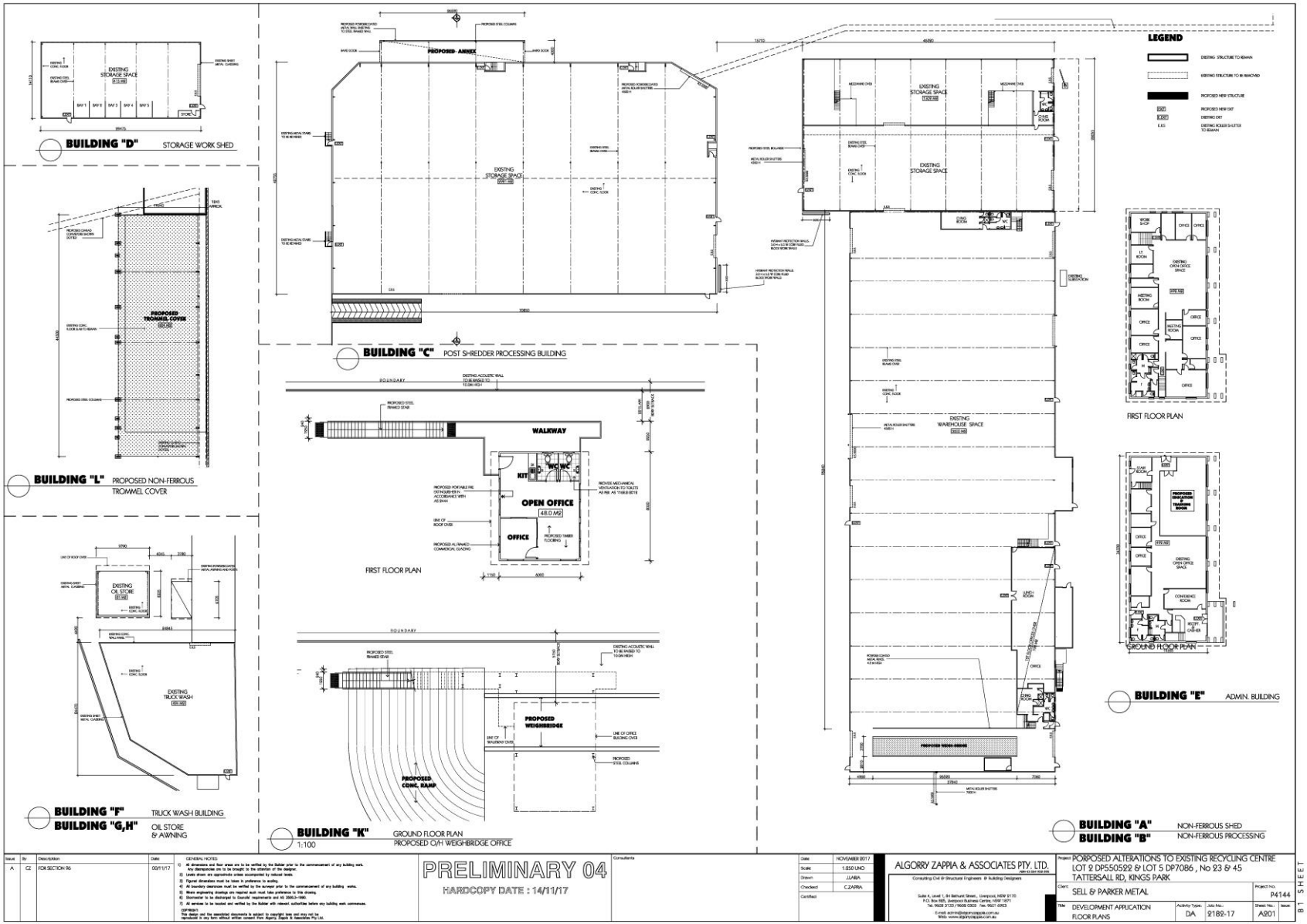
   B35C. Prior to the issue of an occupation certificate for the awning annex adjacent to Building C, the Applicant must ensure that an appropriate sprinkler system has been installed within the awning annex, to the satisfaction of FRNSW.

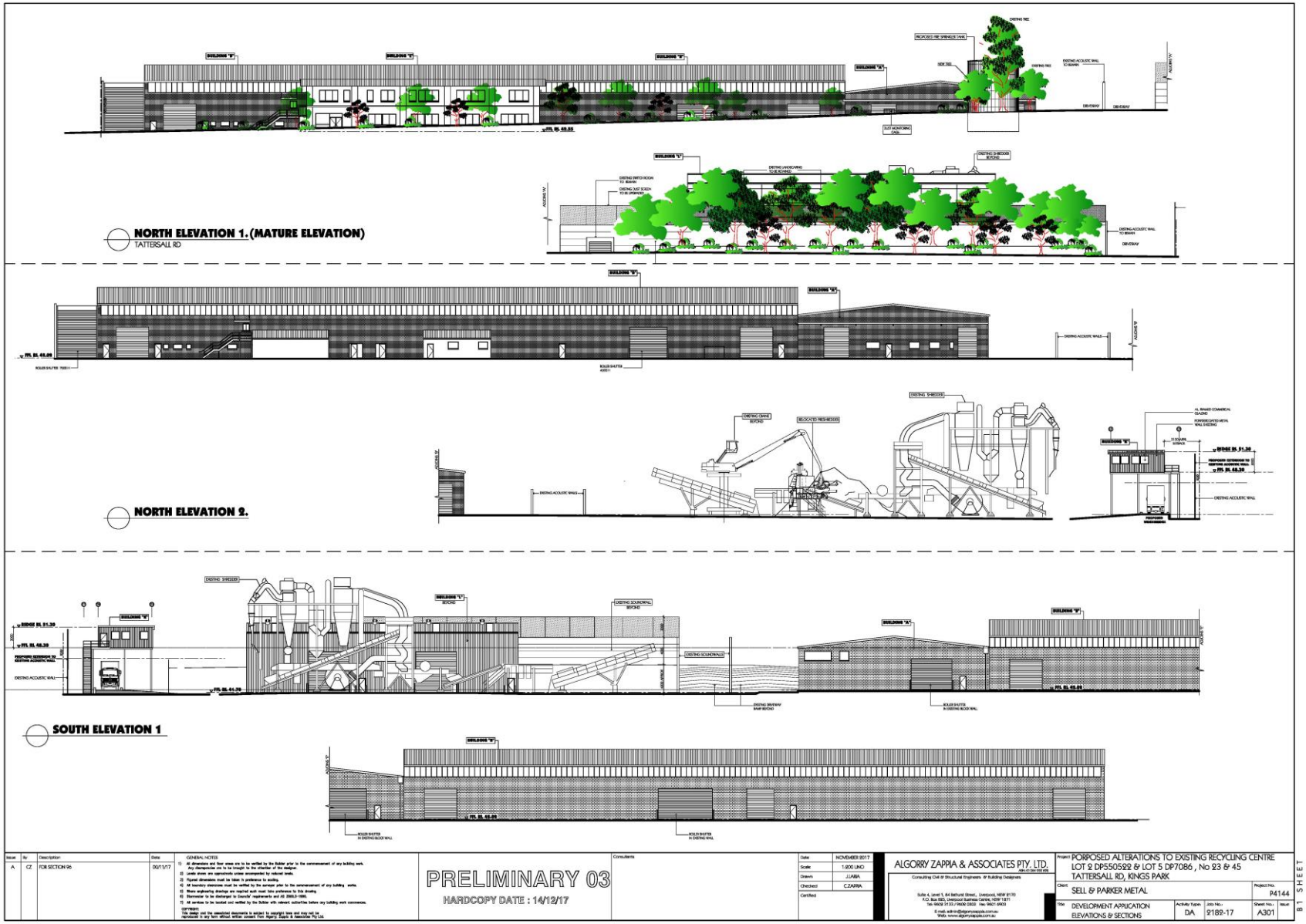
In the Appendices

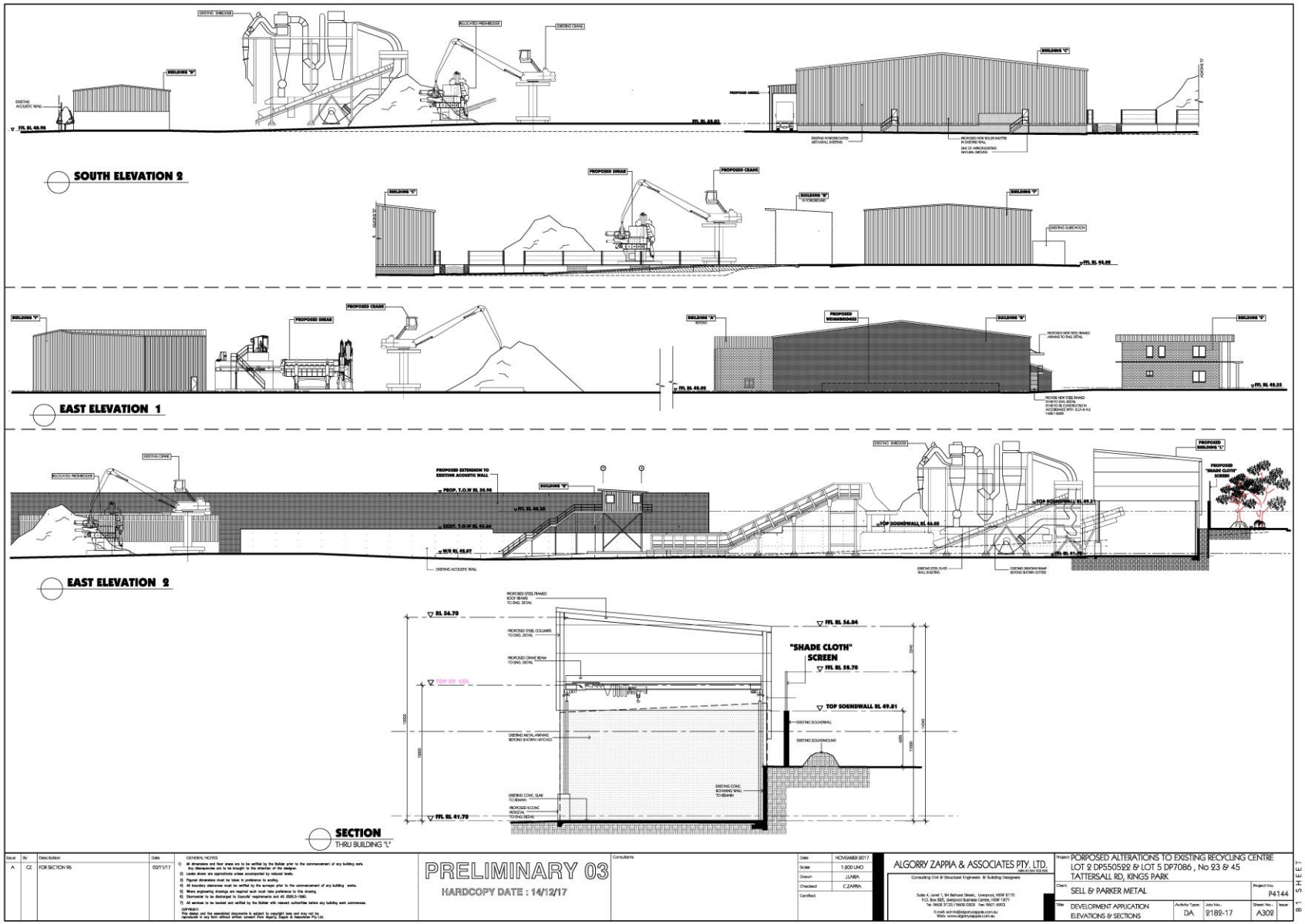
3. Delete Appendix A and replace with the following:

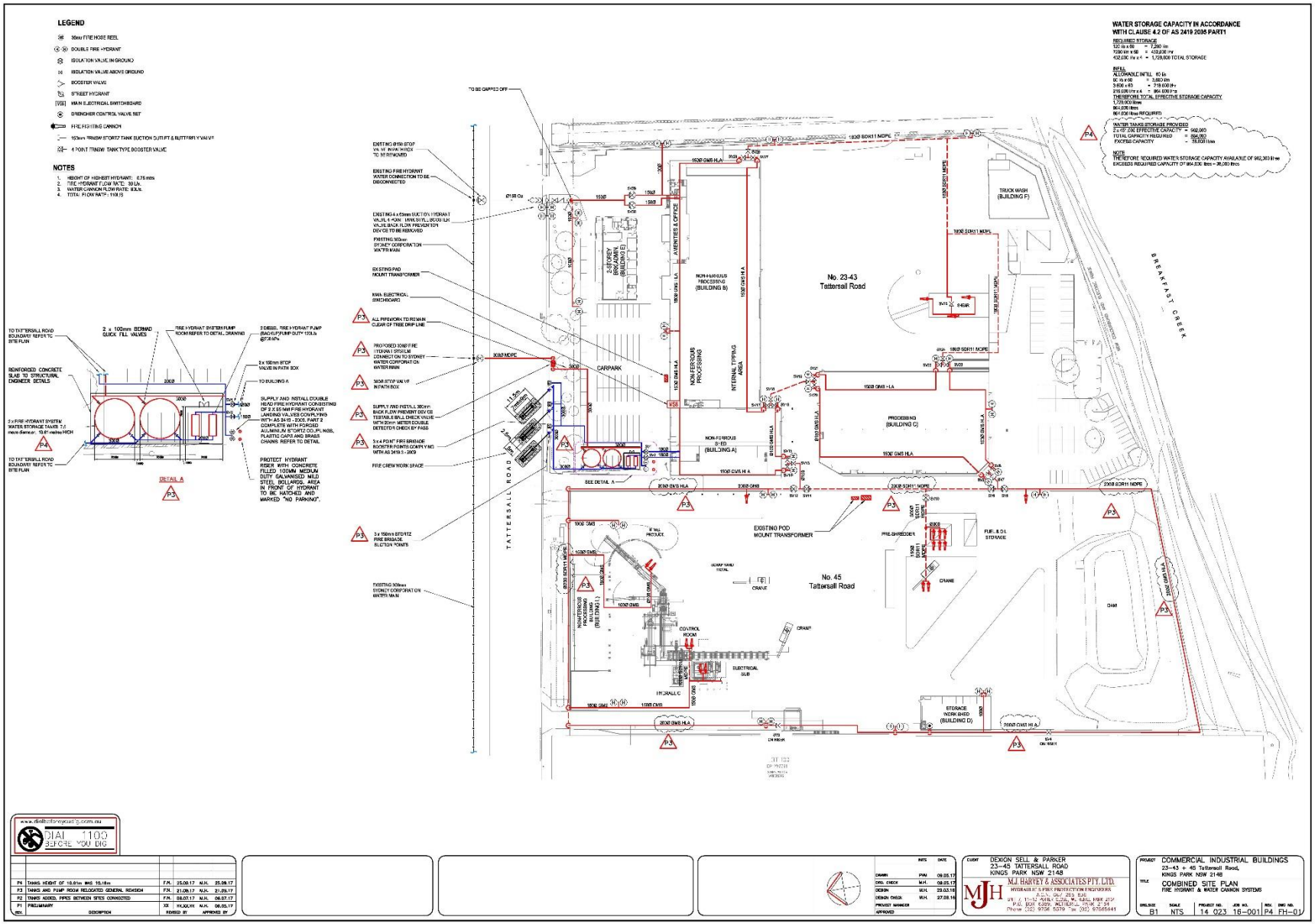
APPENDIX A: SITE LAYOUT AND PLANS


SITE PLAN
PRELIMINARY 05
HARDCOPY DATE : 20/12/17
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 93 & 45 TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
DEVELOPMENT APPLICATION
SITE PLAN
DA
2182-17
A101
LEGEND
DEVELOPMENT DATA
TATTERSALL ROAD
BREAKFAST CREEK


BUILDING "D" STORAGE WORK SHED
EXISTING STORAGE SPACE
BUILDING "L" PROPOSED NON-FERROUS TROMMEL COVER
PROPOSED TROMMEL COVER
BUILDING "F" TRUCK WASH BUILDING
BUILDING "G,H" OIL STORE & AWNING
EXISTING OIL STORE
EXISTING TRUCK WASH
BUILDING "C" POST SHREDDER PROCESSING BUILDING
PROPOSED ANNEX
EXISTING STORAGE SPACE
WALKWAY
KIT
WC
OPEN OFFICE
48.0 M2
OFFICE
FIRST FLOOR PLAN
BUILDING "K" GROUND FLOOR PLAN
PROPOSED O/H WEIGHBRIDGE OFFICE
PROPOSED WEIGHBRIDGE
PROPOSED CONC. RAMP
BUILDING "A" NON-FERROUS SHED
BUILDING "B" NON-FERROUS PROCESSING
EXISTING WAREHOUSE SPACE
LEGEND
FIRST FLOOR PLAN
GROUND FLOOR PLAN
BUILDING "E" ADMIN. BUILDING
PRELIMINARY 04
HARDCOPY DATE : 14/11/17
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45 TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
DEVELOPMENT APPLICATION
FLOOR PLANS
P4144
A201


NORTH ELEVATION 1. (MATURE ELEVATION)
TATTERSALL RD
NORTH ELEVATION 2.
SOUTH ELEVATION 1
PRELIMINARY 03
HARDCOPY DATE : 14/12/17
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
DEVELOPMENT APPLICATION
ELEVATIONS & SECTIONS
DA
2189-17
A301
P4144


SOUTH ELEVATION 2
EAST ELEVATION 1
EAST ELEVATION 2
SECTION
THRU BUILDING "L"
"SHADE CLOTH" SCREEN
TOP SOUNDWALL RL 49.81
FFL RL 56.04
FFL RL 55.70
FFL RL 41.70
PRELIMINARY 03
HARDCOPY DATE : 14/12/17
ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45
TATTERSALL RD, KINGS PARK
SELL & PARKER METAL
P4144
DEVELOPMENT APPLICATION
ELEVATIONS & SECTIONS
DA
2182-17
A302


LEGEND
NOTES
WATER STORAGE CAPACITY IN ACCORDANCE WITH CLAUSE 4.2 OF AS 2419 2005 PART1
No. 23-43 Tattersall Road
No. 45 Tattersall Road
TATTERSALL ROAD
BREAKFAST CREEK
CARPARK
TRUCK WASH (BUILDING F)
AMENITIES & OFFICE
NON-HAZARDOUS PROCESSING (BUILDING B)
NON FERROUS PROCESSING
INTERNAL TIPPING AREA
NON-FERROUS SHED (BUILDING A)
PROCESSING (BUILDING C)
EXISTING POD MOUNT TRANSFORMER
PRE-SHREDDER
CRANE
CONTROL ROOM
ELECTRICAL SUB
HYDRAULIC
STORAGE WORK SHED (BUILDING D)
DETAIL A
DIAL 1100 BEFORE YOU DIG
DEXION SELL & PARKER
23–45 TATTERSALL ROAD
KINGS PARK NSW 2148
M.J. HARVEY & ASSOCIATES PTY. LTD.
COMMERCIAL INDUSTRIAL BUILDINGS
23–43 + 45 Tattersall Road,
KINGS PARK NSW 2148
COMBINED SITE PLAN
FIRE HYDRANT & WATER CANNON SYSTEMS

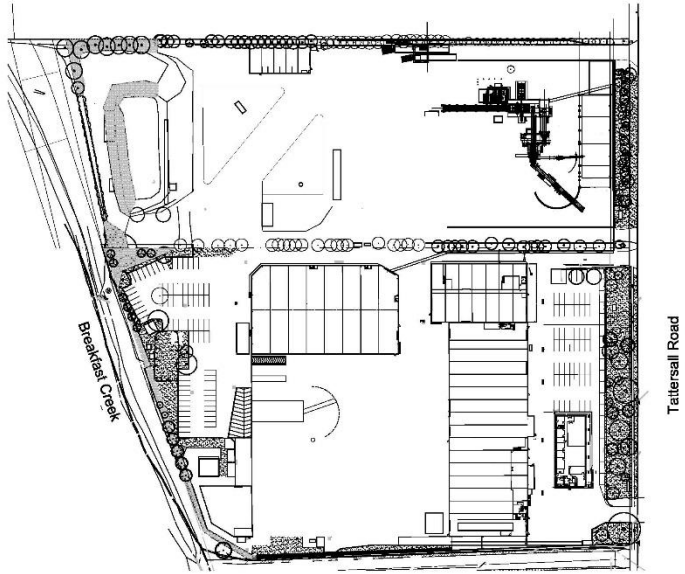
PROPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE

23-43 & 45 TATTERSAL RD, KINGS PARK

LANDSCAPE

DRAWINGS

DWG NO.	DRAWING TITLE	SCALE
000	COVERSHEET	N/A
101	LANDSCAPE MASTERPLAN	1:500
401	LANDSCAPE PLAN	1:250
402	LANDSCAPE PLAN	1:250
403	LANDSCAPE PLAN	1:250
404	LANDSCAPE PLAN	1:250
501	LANDSCAPE DETAILS	AS SHOWN



NOT FOR CONSTRUCTION

A1

The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Issue	Revision Description	Drawn	Check	Date
I	LEC Amendments	JO	NW	22.09.2017
H	Revised carpark	JO	NW	15.08.2017
G	Revised for Fire Services	JW	NW	13.07.2017
F	Updated boundary setting	JO	NW	10.11.2016
E	Revised Planting	JO	NW	18.10.2016
D	Construction certificate	SW	NW	04.10.2016
C	Construction certificate	JO	NW	25.05.2016
B	General Revisions	JW	NW	17.03.2016
A	For Comment	JW	NW	12.02.2016

LEGEND

Key Plan:

Client:
Sell and Parker Pty Ltd

Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park

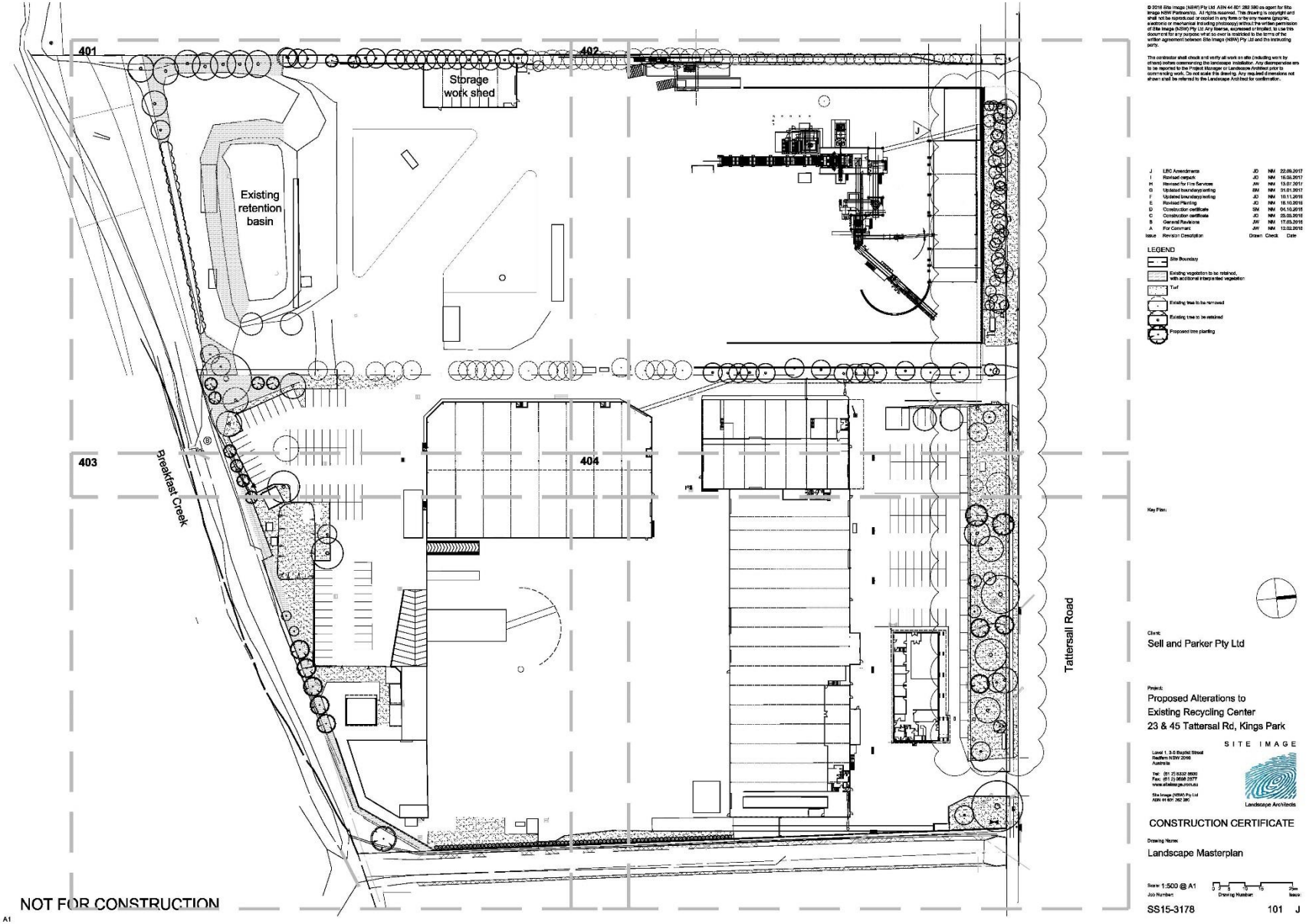
SITE IMAGE
Level 1, 3-5 Baptist Street
Redfern NSW 2016
Australia
Tel: (61 2) 9332 9600
Fax: (61 2) 9698 2577
www.siteimage.com.au
Site Image (NSW) Pty Ltd
ABN 44 601 282 390
Landscape Architects

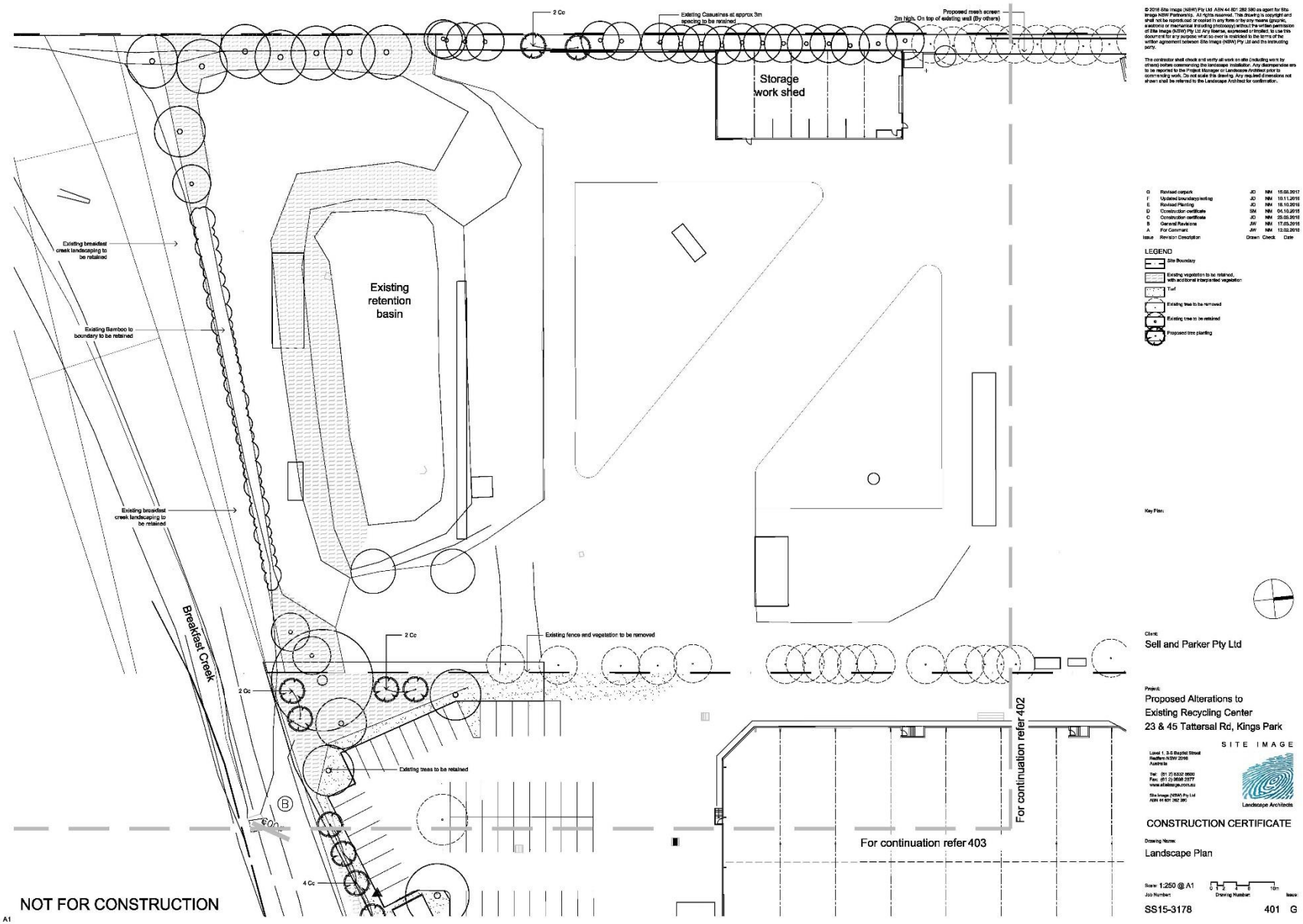
CONSTRUCTION CERTIFICATE

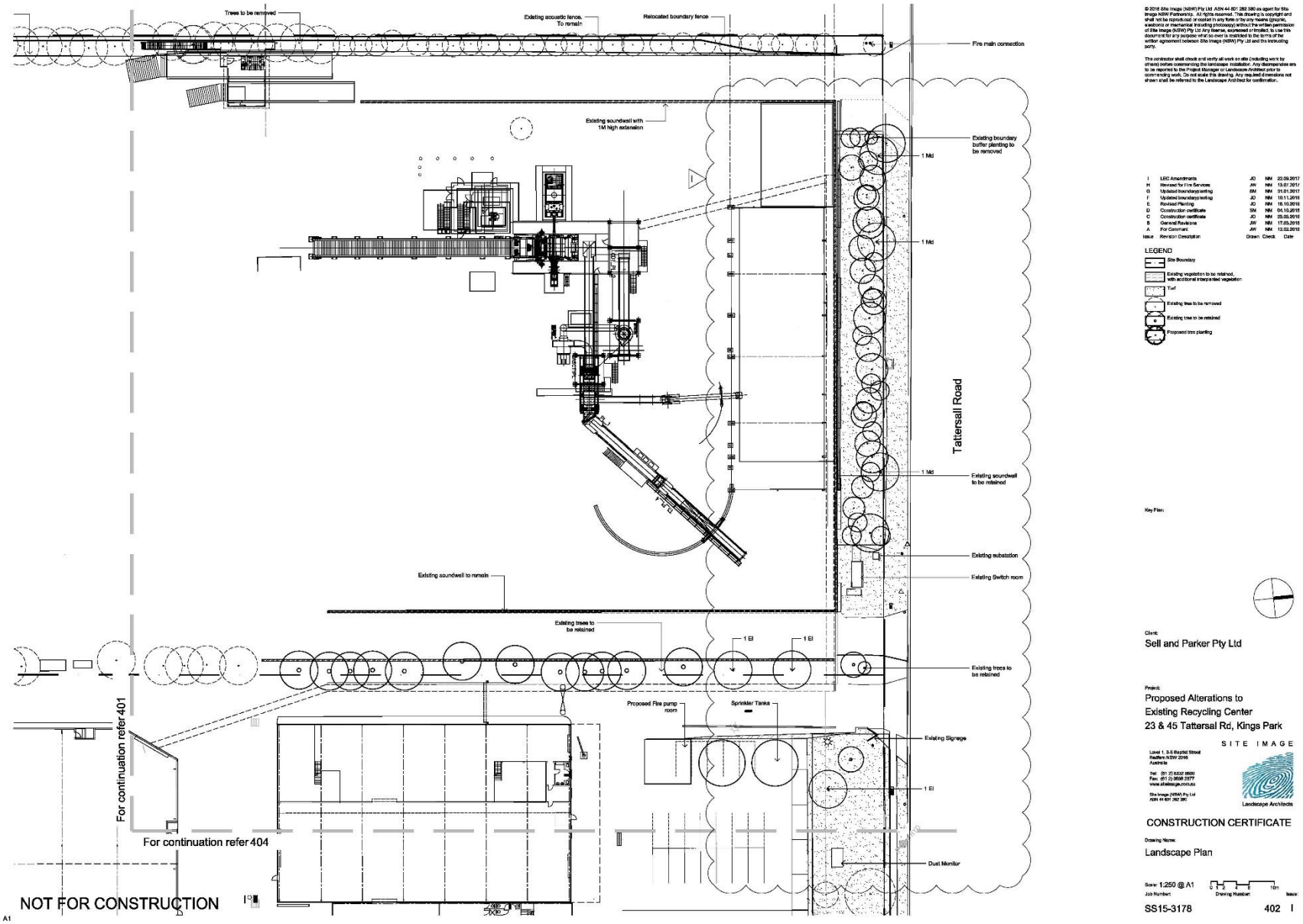
Drawing Name:
Coversheet

Scale:

Job Number:	Drawing Number:	Issue:
SS15-3178	000	I


401
402
403
404
Storage work shed
Existing retention basin
Breakfast Creek
Tattersall Road
NOT FOR CONSTRUCTION
A1
LEGEND
Site Boundary
Existing vegetation to be retained, with additional interpreted vegetation
Turf
Existing tree to be removed
Existing tree to be retained
Proposed tree planting
Key Plan:
Client:
Sell and Parker Pty Ltd
Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park
SITE IMAGE
Landscape Architects
CONSTRUCTION CERTIFICATE
Drawing Name:
Landscape Masterplan
Scale: 1:500 @ A1
Job Number
SS15-3178
Drawing Number
101
Issue
J


2 Cc
Existing Casuarinas at approx 3m spacing to be retained
Proposed mesh screen 2m high. On top of existing wall (By others)
Storage work shed
Existing retention basin
Existing breakfast creek landscaping to be retained
Existing Bamboo to boundary to be retained
Existing breakfast creek landscaping to be retained
Breakfast Creek
2 Cc
Existing fence and vegetation to be removed
2 Cc
Existing trees to be retained
4 Cc
For continuation refer 402
For continuation refer 403
NOT FOR CONSTRUCTION
A1
LEGEND
Site Boundary
Existing vegetation to be retained, with additional interpolated vegetation
Turf
Existing tree to be removed
Existing tree to be retained
Proposed tree planting
Key Plan:
Client:
Sell and Parker Pty Ltd
Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park
SITE IMAGE
Landscape Architects
CONSTRUCTION CERTIFICATE
Drawing Name:
Landscape Plan
Scale: 1:250 @ A1
Job Number
SS15-3178
Drawing Number
401
Issue
G



The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Issue	Revision Description	Drawn	Check	Date
I	LEC Amendments	JD	NW	22.09.2017
H	Revised for Fire Services	JW	NW	13.07.2017
G	Updated boundary/setting	BM	NW	31.01.2017
F	Updated boundary/setting	JD	NW	10.11.2016
E	Revised Planting	JD	NW	18.10.2016
D	Construction certificate	SW	NW	04.10.2016
C	Construction certificate	JD	NW	25.05.2016
B	General Revisions	JW	NW	17.05.2016
A	For Comment	JW	NW	12.02.2016

LEGEND

- Site Boundary
- Existing vegetation to be retained, with additional interpreted vegetation
- Turf
- Existing tree to be removed
- Existing tree to be retained
- Proposed tree planting

Key Plan:

Client:
Sell and Parker Pty Ltd

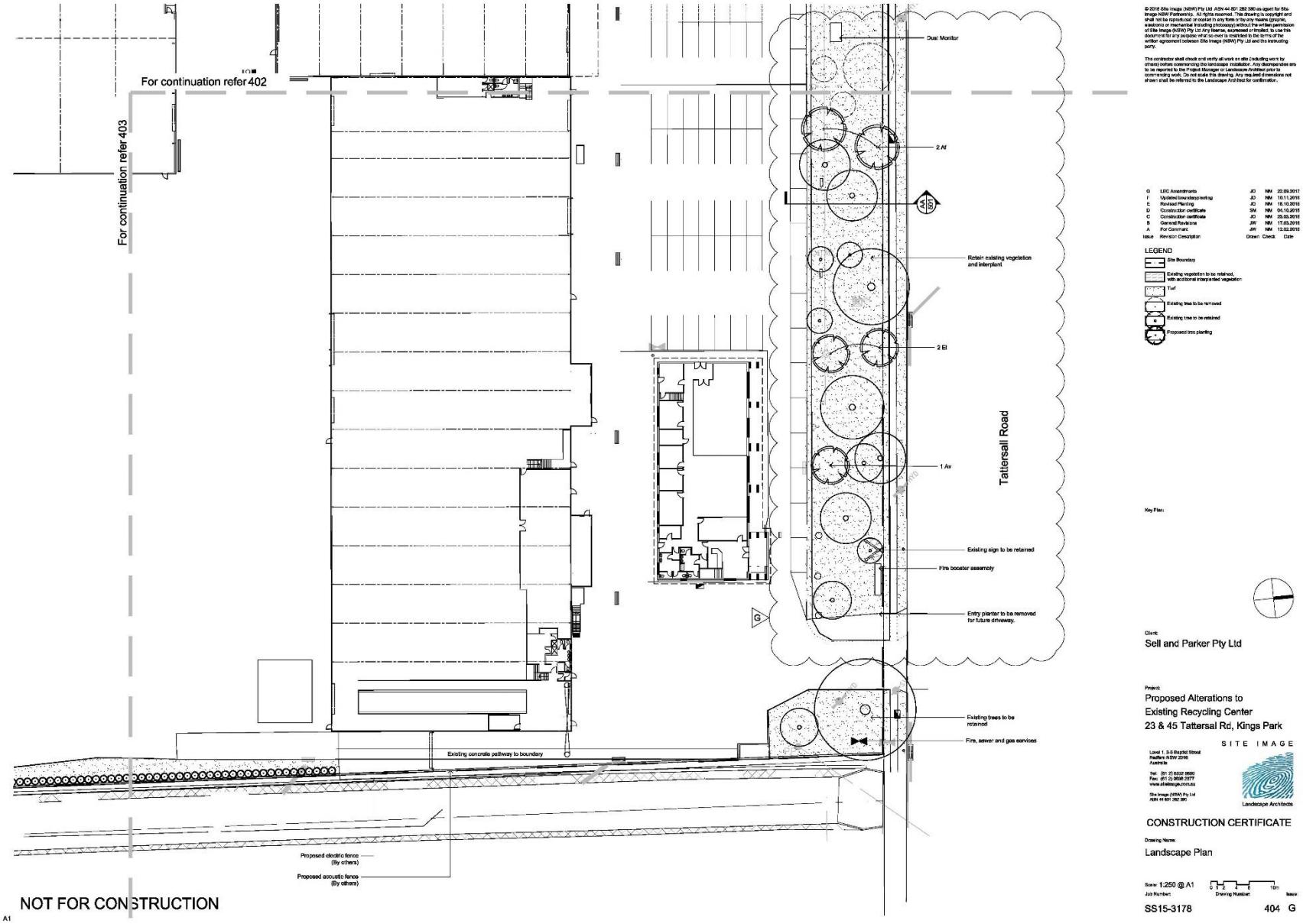
Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park

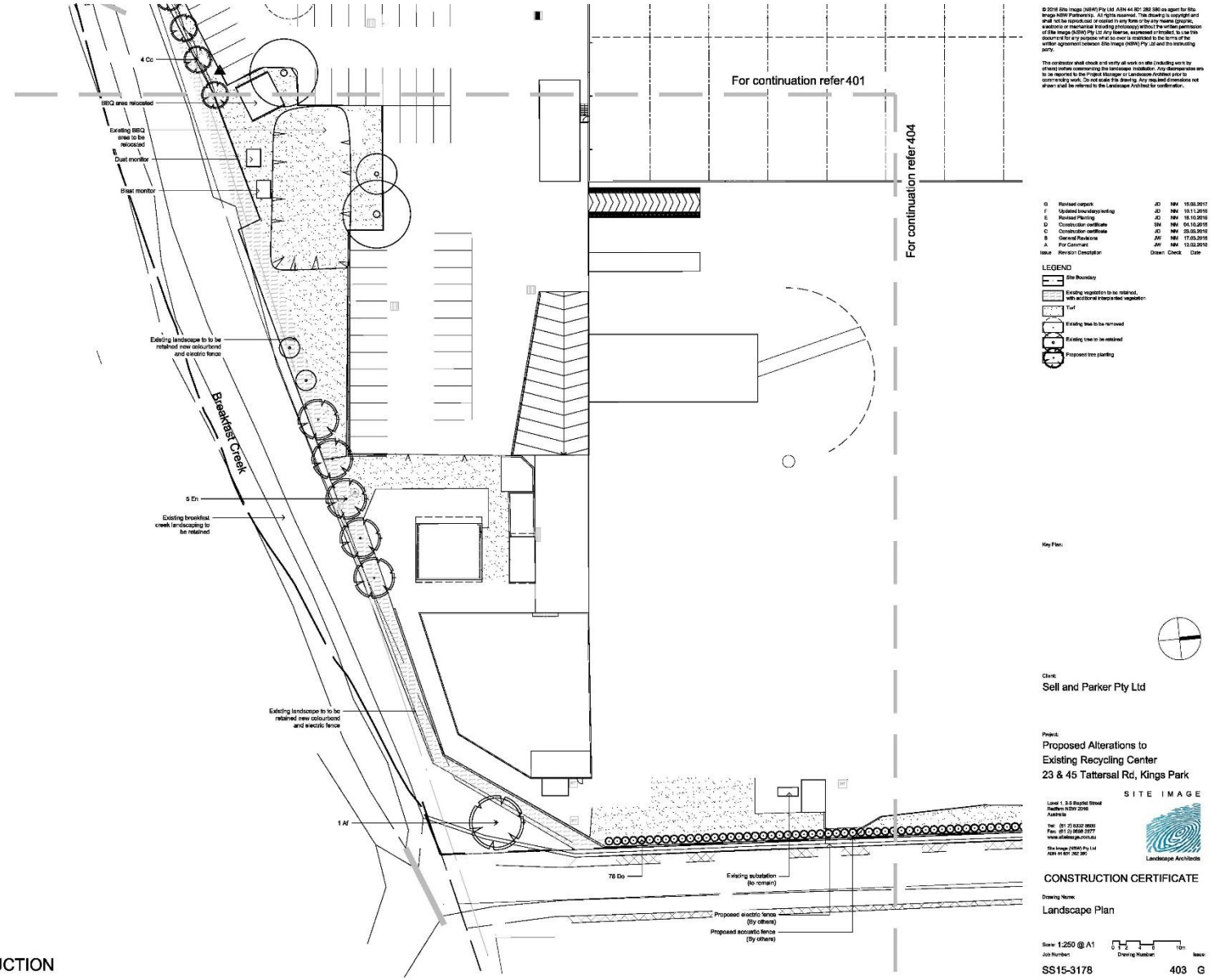
SITE IMAGE
Level 1, 3-5 Baptist Street
Redfern NSW 2016
Australia
Tel: (61 2) 9332 2600
Fax: (61 2) 9698 2577
www.siteimage.com.au
Site Image (NSW) Pty Ltd
ABN 44 001 282 380
Landscape Architects

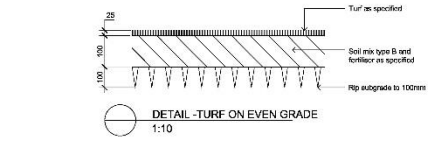
CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Plan

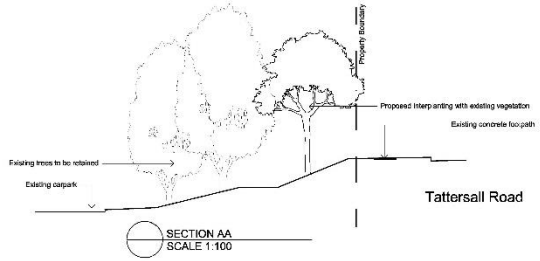
Scale: 1:250 @ A1 (0 2 4 6 10m)
Job Number: SS15-3178
Drawing Number: 402
Issue: I


For continuation refer 402
For continuation refer 403
Dual Monitor
2 Af
4A
Retain existing vegetation and interplant
2 El
Tattersall Road
1 Ar
Existing sign to be retained
Fire booster assembly
Entry planter to be removed for future driveway.
Existing trees to be retained
Fire, sewer and gas services
Existing concrete pathway to boundary
Proposed electric fence (By others)
Proposed acoustic fence (By others)
NOT FOR CONSTRUCTION
A1
LEGEND
Site Boundary
Existing vegetation to be retained, with additional interplanted vegetation
Turf
Existing tree to be removed
Existing tree to be retained
Proposed tree planting
Key Plan:
Client:
Sell and Parker Pty Ltd
Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park
SITE IMAGE
Landscape Architects
CONSTRUCTION CERTIFICATE
Drawing Name:
Landscape Plan
Scale: 1:250 @ A1
Job Number
SS15-3178
Drawing Number
404
Issue
G

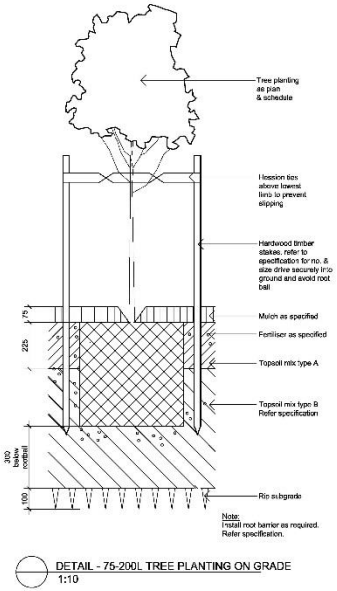

For continuation refer 401
For continuation refer 404
4 Cc
BBQ area relocated
Existing BBQ area to be relocated
Dust monitor
Blast monitor
Existing landscape to to be retained new colourbond and electric fence
Breakfast Creek
5 En
Existing breakfast creek landscaping to be retained
Existing landscape to to be retained new colourbond and electric fence
1 Af
78 Do
Existing substation (to remain)
Proposed electric fence (By others)
Proposed acoustic fence (By others)
LEGEND
Site Boundary
Existing vegetation to be retained, with additional interpreted vegetation
Turf
Existing tree to be removed
Existing tree to be retained
Proposed tree planting
Key Plan:
Client:
Sell and Parker Pty Ltd
Project:
Proposed Alterations to
Existing Recycling Center
23 & 45 Tattersal Rd, Kings Park
SITE IMAGE
Landscape Architects
CONSTRUCTION CERTIFICATE
Drawing Name:
Landscape Plan
Scale: 1:250 @ A1
Job Number:
SS15-3178
Drawing Number:
403
Issue:
G
NOT FOR CONSTRUCTION
A1



DETAIL -TURF ON EVEN GRADE
1:10



SECTION AA
SCALE 1:100



DETAIL - 75-200L TREE PLANTING ON GRADE
1:10

Symbol	Botanic Name	Common Name	Mature Size (h x w)	Pot Size	Spacing	Qty
	TREES					
Af	*Angophora floribunda*	Rough-Barked Apple	20 x 9	100L	As Shown	5
Av	*Allocasuarina verticillata*	Drooping She-Oak	8 x 7	100L	As Shown	1
Cs	*Casuarina cunninghamiana*	River Sheoak	20 x 9	100L	As Shown	10
El	*Eucalyptus leucoxylon 'Euky Dwarf'*	Euky Dwarf	7 x 5	100L	As Shown	6
Em	*Eucalyptus microtheca*	Willow Peppermint	12 x 9	100L	As Shown	5
Md	*Melaleuca decora*	White Feather Honey Myrtle	6 x 3	100L	As Shown	5
	BAMBOO					
Do	*Dendrocalamopsis oldhamii*	Giant Timber Bamboo	15 x 2	300mm	As Shown	78

Maintenance Schedule

Tasks	ACTIVITY	FREQUENCY D	W	2W	3W	M	3or6M	ACTION
1	Logbook			+		+		Daily, Weekly, Monthly Complete a logbook entry every day on site and at least every two weeks. All actions listed below require a logbook entry. Upon request, make the logbook available for inspection. Submit copies of new entries to the logbook to the Contract Administrator on a monthly basis. Please note that even if no visit, short, occasional inspection should result in less maintenance work when problems are observed earlier than they might otherwise have been seen.
								Maintenance requirements should extend for a minimum of two years after the completion of works or until such time as a minimum 90% survival rate for all plantings and a maximum five percent (5%) weed cover for the treated planter combo (controlled activity) is achieved. Maps or diagrams which identify the proposed application area, existing vegetation, vegetation to be retained, vegetation to be cleared, footprint of construction activities, areas of proposed revegetation etc should be prepared.
2	Plant replacement			+		+		Inspect and replace failed plants within 2 weeks of observation of failure. Match species, size (original) and location of new with old.
3	Mulch			+		+		Inspect and replace mulch deficiencies within 2 weeks of observation. Prior to placing new mulch aerate the soil by fork turning to a depth of at least 150mm, roughly level the soil and then place mulch. Do not disturb major plant roots while aerating soil. It can be expected that mulch will have significantly broken-down after an estimated 12-month period following initial application. It is therefore recommended that all mulch beds are topped-up with a 50mm layer of woodchip/soil mix/s (Compliant with AS 4454) at this stage. This should be accompanied by a top dressing application of a 6-month, slow release, low phosphorous fertiliser to ensure that semi-established plantings do not suffer as a result of potential nitrogen draw-down that may be associated with the application of the 50mm mulch layer in the 12-month period.
4	Erosion control			+				Inspect every two weeks and repair ground scour and mulch immediately. Maintain erosion control device as necessary. Silt fencing installed for sediment control purposes to the east of the tributary. Silt fencing should be regularly inspected and repaired or reinstalled as necessary.
5	Stakes and ties			+				Inspect every two weeks, adjust and/or replace as necessary but remove as plants mature and are able to support themselves.
6	Weed and rubbish removal			+				Inspect and remove immediately upon observation. Leave no waste on site. Dispose of waste material at a designated waste disposal site. All herbaceous weeds should be managed to be at very low percentage cover levels (ie a minimum), or better. Pasture grasses should be prevented from spreading into any bush and weeds by applying a spot glyphosate herbicide spray application at the 1-metre wide buffer zone, on a monthly basis or as required.
								Maintenance weeding for a period of 24 months after the completion of primary works with an increase in maintenance hours occurring throughout the warmer growing months.
7	Pruning			+				Inspect every 2 weeks and prune as necessary to ensure dead wood, improve plant shape and promote healthy vigorous new growth.
8	Spraying			+				Inspect every 2 weeks and action as necessary. Do not spray if other non-chemical methods will satisfy the need to remove insects. Spray for disease control only when absolutely necessary.
9	Urgent works		+					Complete within 1 week (7 days) of notification. Inspect and clear drains.
10	Planting and fertilising			+			3m+	Inspect every 2 weeks and remove spent flowers and dead stalks as they become apparent. Fertilise gardens every 3 months or other frequency in accordance with fertiliser manufacturer's directions.
11	Watering	+		+				Water when and where necessary every day at site and at least every 2 weeks generally. Do not allow soil and plants to dehydrate. Allow for prolonged rain, windy and dry periods. Water in the early morning or late afternoon to avoid excessive evaporation during the heat of the day.
12	Mowing, top dressing and edging			+		+	6m+	Summer fortnightly, Winter monthly. Top-dress 6 monthly.

This contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Issue	Revision Description	Drawn	Check	Date
I	LEC Amendments	JD	NM	20.09.2017
H	Revised for Pre Services	JW	NM	18.07.2017
G	Updated boundary planting	SM	NM	31.01.2017
F	Updated boundary planting	JD	NM	16.11.2016
E	Revised Planting	JD	NM	18.10.2016
D	Construction certificate	SM	NM	04.10.2016
C	Construction certificate	JD	NM	28.09.2016
B	General Revisions	JW	NM	17.06.2016
A	For Comment	JW	NM	12.02.2016

LEGEND

Key Plan

Client:
Sell and Parker Pty Ltd

Project:
Proposed Alterations to Existing Recycling Center
23 & 45 Tattersall Rd, Kings Park

SITE IMAGE
Level 1, 3-5 Baptist Street Redfern NSW 2016 Australia
Tel: (61 2) 9358 5860
Fax: (61 2) 9698 2877
www.siteimage.com.au
Site Image (NSW) Pty Ltd ABN 44 907 283 880
Landscape Architects

CONSTRUCTION CERTIFICATE

Drawing Name:
Landscape Details

Scale: 1:250 @ A1 (0 2 4 6 10m)
Job Number: SS15-3178
Drawing Number: 501
Issue: I

NOT FOR CONSTRUCTION

A1

APPENDIX F MOD 3

Modification of Development Consent

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

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

Chris Ritchie
Director
Industry Assessments

Sydney 29 MAY 2019 File: EF19/718

SCHEDULE 1

Application No:	SSD 5041
Applicant:	Sell and Parker Pty Ltd
Consent Authority:	Minister for Planning
Development:	Increasing the processing capacity of the existing metal recycling facility, including reconfiguration and expansion of the facility into the adjoining site at 23-43 Tattersall Road, Kings Park.
Date of Original Consent:	12 November 2015
Modification:	SSD 5041 MOD 3 – changes to plant including conversion of an existing shear, realignment of the overhead conveyor and relocation of the pre-shedder, increase in operational hours for cleaning and maintenance, and administrative changes for the discharge of wastewater.

SCHEDULE 2

This consent is modified as follows:

1. Insert the following definition in alphabetical order:

Modification Assessments	The document assessing the environmental impact of a proposed modification of this consent and any other information submitted with the following modification applications made under the EP&A Act: (a) Modification Application SSD 5041 MOD 1 and accompanying document titled *Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park* dated August 2016 prepared by Higgins Planning, additional information from Higgins Planning dated 22 December 2016 and further additional information from Allens and Linklaters dated 9 February 2017; and (b) Modification Application SSD 5041 MOD 2 and accompanying document titled *Statement of Environmental Effects 23-43 and 45 Tattersall Road, Kings Park* dated December 2017 prepared by Higgins Planning. (c) Modification Application SSD 5041 MOD 3 and accompanying document titled *Section 4.55(1A) Application (SSD 5041 – Mod 3), 23-43 and 45 Tattersall Road, Kings Park* dated 11 February 2019 and Response to Submissions dated 4 April 2019 prepared by Arcadis Australia Pacific Pty Ltd

In Schedule 2

2. Delete Condition A2 and replace with the following:

   A2. The Applicant shall carry out the Development in accordance with the:
   (a) EIS prepared by ERM dated July 2014;
   (b) Response to Submissions report prepared by ERM dated 7 January 2015;
   (c) Supplementary Response to Submissions prepared by Mecone dated 30 June 2015;
   (d) Supplementary Response to Submissions prepared by Sell and Parker Pty Ltd dated 3 September 2015;
   (e) Modification Assessments
   (f) Site layout plans and drawings (See Appendix A);
   (g) Management and Mitigation Measures (see Appendix B);

3. Delete condition B6(e).

4. Delete condition B7(e)

5. Delete Condition B26 and replace with the following:

   B26. The Applicant shall ensure that noise generated by the construction and/or operation of the Development does not exceed the noise criteria in Table 2.

Table 2: Noise criteria (dB(A))

Location	Noise criteria (dB(A))				
	Day	Evening	Night	Morning Shoulder	
	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (15\ minute)}$	$L_{Aeq\ (1\ minute)}$
189 Sunnyholt Road	46	46	38	46	58

6. Delete Condition B31 and replace with the following:

B31. The Applicant shall ensure that noise generated by the construction and/or operation of the Development does not exceed the noise criteria in Table 3.

Table 3: Hours of Construction and Operation

Activity		Day	Hours
Construction		Monday – Friday	7 am to 6 pm
		Saturday	8 am to 1 pm
		Sunday & Public Holidays	Nil
Operation	**Oxy-acetylene torch cutting**	Monday – Saturday	9 am to 3 pm
		Sunday & Public Holidays	Nil
	Cleaning and maintenance	Monday – Saturday	9pm to 6 am
		Sunday & Public Holidays	24 hours
	All other activities	Monday – Saturday	6 am to 9 pm
		Sunday & Public Holidays	Nil

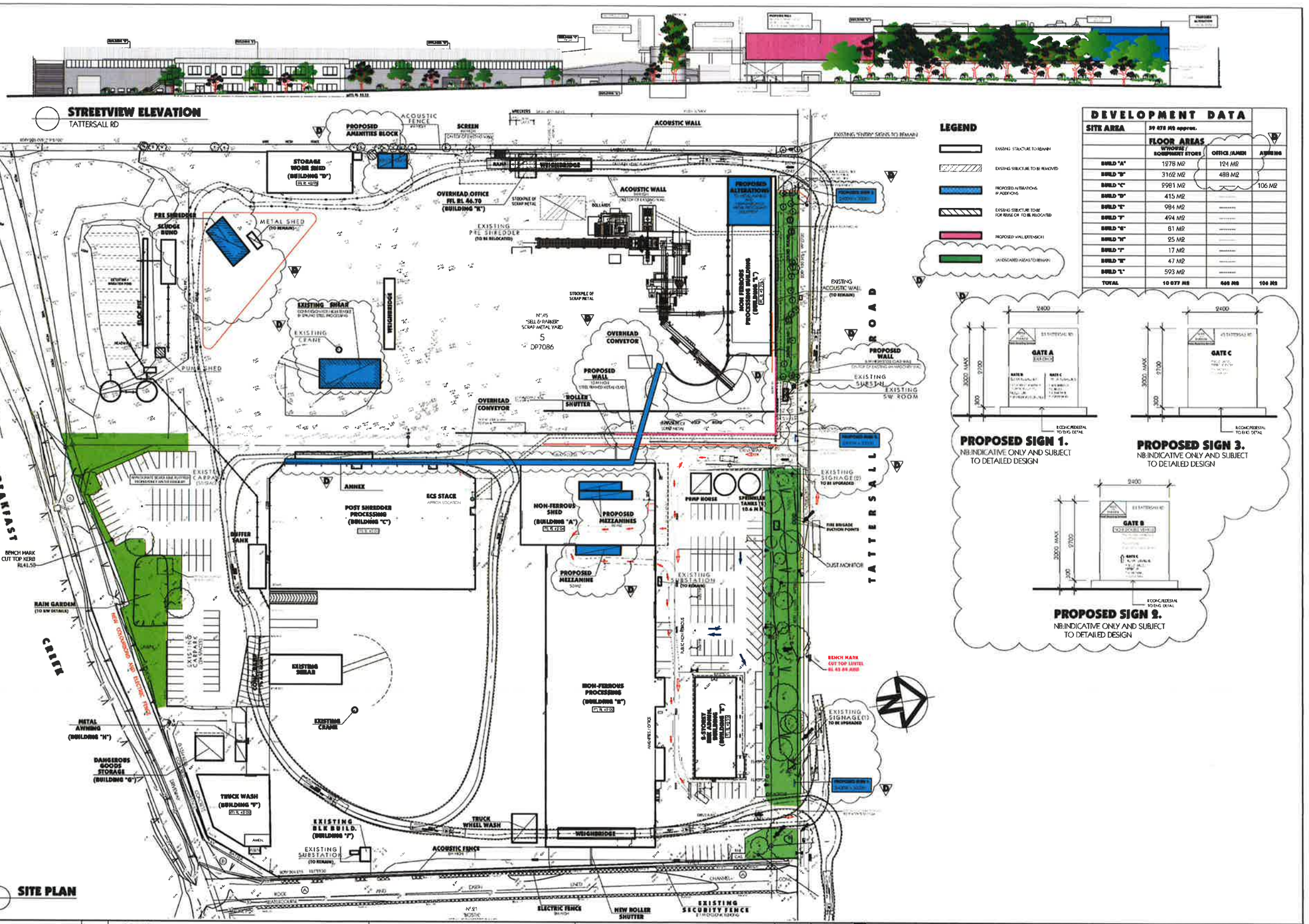
7. Insert new Condition after B35C as follows:

B35D. Prior to the commencement of operation of the relocated pre-shredder the Applicant shall submit a Final Stockpile Plan to the satisfaction of the Secretary and FRNSW.

In the Appendices

8. Add new Site Plan to Appendix A.

APPENDIX A: SITE LAYOUT AND PLANS



Issue	By	Description	Date
A	CZ	SECTION 96	01/06/18
B	CZ	MODIFICATION APPLICATION 4 55	03/12/18
C	CZ	MODIFICATION APPLICATION 4 55	21/01/19
D	CZ	MODIFICATION APPLICATION 4 55	29/01/19

GENERAL NOTES:
1) All dimensions and floor levels are to be verified by the Builder prior to the commencement of any building work. Any discrepancies are to be brought to the attention of the designer.
2) Levels shown are approximate unless accompanied by reduced levels.
3) Figured dimensions must be taken in preference to scaling.
4) All boundary dimensions must be verified by the surveyor prior to the commencement of any building works.
5) Where engineering drawings are required such must take preference to this drawing.
6) Stormwater to be discharged to Council's requirements and AS 3500.3-1992.
7) All services to be located and verified by the Builder with relevant authorities before any building work commences.

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Consultants

Date	NOVEMBER 2017
Scale	1:500 (A1)
Drawn	JTANGA
Checked	CZAPPIA
Certified	

ALGORRY ZAPPIA & ASSOCIATES PTY. LTD.
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Project: PORPOSED ALTERATIONS TO EXISTING RECYCLING CENTRE
LOT 2 DP550522 & LOT 5 DP7086 , No 23 & 45 TATTERSALL RD, KINGS PARK

Client: SELL & PARKER METAL — Project No: P4144

Title: DEVELOPMENT APPLICATION — Activity Table: DA — Job No.: 2182-17 — Sheet No.: A101 — Issue: D

SITE PLAN

B1 SHEET

APPENDIX G EPA LICENCE

Environment Protection Licence

Licence - 11555

Licence Details	
Number:	11555
Anniversary Date:	19-April

Licensee

SELL & PARKER PTY LTD

PO BOX 755

MATRAVILLE NSW 2036

Premises

SELL & PARKER PTY LTD

23-43 AND 45 TATTERSALL ROAD

KINGS PARK NSW 2148

Scheduled Activity

Metallurgical activities

Fee Based Activity	Scale
Scrap metal processing	> 100000-500000 T annual production capacity

Region

Waste & Resource Recovery

59-61 Goulburn Street

SYDNEY NSW 2000

Phone: (02) 9995 5000

Fax: (02) 9995 5999

PO Box A290 SYDNEY SOUTH

NSW 1232

Environment Protection Licence

Licence - 11555

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Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Environment Protection Licence

The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

SELL & PARKER PTY LTD
PO BOX 755
MATRAVILLE NSW 2036

subject to the conditions which follow.

Environment Protection Licence

Licence - 11555

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Metallurgical activities	Scrap metal processing	> 100000 - 500000 T annual production capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
SELL & PARKER PTY LTD
23-43 AND 45 TATTERSALL ROAD
KINGS PARK
NSW 2148
LOT 5 DP 7086, LOT 2 DP 550522

A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:
a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

Environment Protection Licence

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P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
3	Air discharge and monitoring	Air discharge and monitoring	Hammermill Stack

P1.2 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

Noise

EPA identification no.	Type of monitoring point	Location description
1	Noise monitoring	189 Sunnyholt Road, BLACKTOWN NSW 2148 (Lot 23, DP 1063300)
11	Air blast overpressure monitoring	23-43 & 45 Tattersall Road, KINGS PARK NSW 2148
12	Meteorological Station	23-43 & 45 Tattersall Road, KINGS PARK NSW 2148

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Air Concentration Limits

POINT 3

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	1	Dry 273K, 101.3kPa		1hr or the min. sampling period specified

Solid Particles	milligrams per cubic metre	20	Dry, 273K, 101.3kPa	1hr or the min. sampling period specified

L3 Waste

L3.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.
Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.
Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.
This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Scrap metal	N/A	Metallurgical Activities	As outlined in L3.2, L3.3, L3.4 & L3.5 below

L3.2 A maximum of 90,000 tonnes of Scrap Metal is permitted to be received at the Premises per year on a weekly pro-rata basis until:
a) The Hammermill Emission Collection System has been commissioned in accordance with Condition B20 of development consent No. SSD 5041 and approved by the Secretary of the NSW Department of Planning and Environment (or nominee) for operation; and
b) A Final Occupation Certificate has been issued for the development approved by development consent No. SSD 5041.

L3.3 A maximum of 90,000 tonnes of Scrap Metal is permitted to be processed at the Premises per year on a weekly pro-rata basis until:
a) The Hammermill Emission Collection System has been commissioned in accordance with Condition B20 of development consent No. SSD 5041 and approved by the Secretary of the NSW Department of Planning and Environment (or nominee) for operation; and
b) A Final Occupation Certificate has been issued for the development approved by development consent No. SSD 5041.

L3.4 Once the Hammermill Emission Collection System has been commissioned and a Final Occupation Certificate issued in accordance with conditions L3.2 and L3.3, a maximum of 350,000 tonnes of scrap metal is permitted to be *received* at the Premises per year.

L3.5 Once the Hammermill Emission Collection System has been commissioned and a Final Occupation Certificate issued in accordance with conditions L3.2 and L3.3, a maximum of 350,000 tonnes of scrap metal is permitted to be *processed* at the Premises per year.

L3.6 The Licensee must record the amount of waste (in tonnes) received at the premises on a daily basis.

Environment Protection Licence

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L4 Noise limits

L4.1 Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.

POINT 1

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	46
Evening	LAeq (15 minute)	-	46
Morning-Shoulder	LAeq (15 minute)	-	46
Morning-Shoulder	Lmax OR LA1,1min	-	58

L4.2 For the purpose of condition L4.1;

- Day is defined as the period from 7am to 6pm Monday to Saturday.
- Evening is defined as the period from 6pm to 10pm Monday to Saturday.
- Morning Shoulder is defined as the period 6am to 7am Monday to Saturday.

L4.3 The noise limits set out in condition L4.1 apply under all meteorological conditions except for the following:

a) Wind speeds greater than 3 metres/second at 10 metres above ground level.
b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
c) Stability category G temperature inversion conditions.

L4.4 For the purposes of condition L4.3:

a) Data recorded by a meteorological station installed on the premises must be used to determine meteorological conditions; and
b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L4.5 To determine compliance:
a) With the LAeq(15 minute) noise limits in condition L4.1, the noise measurement equipment at monitoring point 1 must be located:
· Approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
· Within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable within approximately 50 metres of the boundary of a National Park or a Nature Reserve.
b) With the LA1,1min noise limits in condition L4.1, the noise measurement equipment at the monitoring

point 1 must be located within 1 metre of a dwelling façade.
c) With the noise limits in condition L4.1, the noise measurement equipment at the noise monitoring point/s specified in this licence must be located:
· At the most affected point at a location where there is no dwelling at the location; or
· At the most affected point within an area at a location prescribed by conditions L4.5(a) or L4.5(b).

L4.6 A non-compliance of condition L4.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed by conditions L4.5(a) and L4.5(b); and/or
- at a point other than the most affected point at a location.

L4.7 For the purposes of determining the noise generated at the Premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

Note: Noise is 'sound pressure levels' for the purposes of conditions L4.1 to L4.7.

Note: NSW Industrial Noise Policy is the document entitled "New South Wales Industrial Noise Policy published by the Environment Protection Authority in January 2000."

L5 Hours of operation

L5.1 The hours of operation for oxy-acetylene torch cutting must be within the following hours:

Oxy-acetylene torch cutting	Hours of operation
Monday to Saturday	9:00am to 3:00pm
Sunday and Public Holidays	Nil

Note: The EPA will not permit any changes to hours of oxy-acetylene torch cutting unless the Secretary of the NSW Department of Planning and Environment (or nominee) agrees in writing to change the hours of operation specified in development consent No. SSD 5041.

L5.2 The hours of operation for all other activities must be within the following hours:

All other activities	Hours of operation
Monday to Saturday	6:00am - 9:00pm
Sunday and Public Holidays	Nil

L5.3 Condition L5.2 does not apply to the delivery of material outside the hours of operation permitted by condition L5.2, if that delivery is required by police or other authorities for safety reasons. In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible

or within a reasonable period in the case of emergency.

L6 Potentially offensive odour

L6.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

L7 Other limit conditions

Airblast Overpressure

L7.1 The airblast overpressure level from explosions on the Premises must not exceed 120dB (Lin Peak) when measured at Monitoring Point 11.

L7.2 The licensee must measure airblast overpressure at the boundary of the premises whilst any activities are being carried out at the premises.

L7.3 The licensee shall undertake all reasonable and feasible measures necessary to prevent explosions from occurring at the premises.

L7.4 The licensee must prepare and implement an Air Blast Overpressure Management Plan. The Plan must include, but not be limited to, a description of all reasonable and feasible measures that will be implemented to achieve the noise limits in condition L7.1 such as:

- All petrol tanks and other dangerous chemical containers removed from scrap metal prior to shredding;
- Any potentially explosive devices including gas cylinders, not entering the shredder; and
- All potentially explosive devices, including gas cylinders must be disposed of in an environmentally satisfactory manner.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.
This includes:
a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

Environment Protection Licence

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
a) must be maintained in a proper and efficient condition; and
b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise emission of dust from the premises.

O3.2 The licensee must manage stockpiles of scrap metal and processed material to ensure air emissions are minimised.

O3.3 All areas on the premises must be maintained, at all times, in a condition which effectively minimises the emission of wind-blown or traffic-generated dust.

O3.4 The licensee must ensure that no material, including sediment or oil, is tracked onto public roads from the premises.

O3.5 By 30 September 2016, ambient real time PM10 Dust Monitors must be installed and operated in accordance with the information supplied to the EPA in the report by ERM, Waste Metal Recovery, Processing and Recycling Facility 45 and 23-43 Tattersall Road, Kings Park, Blacktown, Air Quality Assessment, Sell & Parker Pty Ltd, September 2015.

O3.6 The licensee must keep a legible record of when dust generating activities are reduced or ceased as a result of the dust monitoring required by Condition O3.4 including:
a) the date and time that dust generating activities were reduced or ceased; and
b) what activities were reduced or ceased.
These records must be made available to the EPA on request.

O4 Emergency response

O4.1 The licensee must develop, implement, maintain and test a Pollution Incident Response Management Plan (PIRMP) in accordance with the requirements under Part 5.7A of the *Protection of the Environment Operations Act 1997* and its regulations.

Fire Control

O4.2 There must be no burning or incineration of waste at the premises.

O4.3 After the Final Occupation Certificate is issued for the development approved by development consent No. SSD 5041, the licensee must ensure that the height of any stockpile of shredder floc does not exceed 4 metres.

O5 Processes and management

O5.1 The licensee must ensure that any waste generated and/or stored at the Premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.

O5.2 The licensee must ensure that waste identified for recycling is stored separately from other waste.

O5.3 The Licensee must store all chemicals, fuels and oils at the Premises in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's *Storing and Handling Liquids: Environment Protection - Participant's Manual 2007*.

O6 Other operating conditions

O6.1 By 30 September 2016 the hammermill must be serviced by a emission collection system consisting of a wet scrubber and cyclone or other pollution control equipment capable of achieving equivalent emission control performance. The use of alternate control equipment must be approved in writing by the EPA prior to installation.

O6.2 (a) Oxy-cutting must be undertaken under wet conditions.

(b) Within 28 days of the commissioning of the 1400 tonne shear or by 31 January 2017, whichever date occurs first, oxy-cutting must be undertaken by only one oxy-cutter at a time.

O6.3 Truck unloading of raw materials and output from pre-shredder onto stockpiles must be completed with a water spray suppression control.

O6.4 After the Final Occupation Certificate is issued for the development approved by development consent No. SSD 5041, by-product stockpiles, including all automotive shredder residue (floc), must be stored in an enclosed structure.

O6.5 After the Final Occupation Certificate is issued for the development approved by development consent No. SSD 5041, all conveyors and conveyor transfer points must be fully enclosed.

O6.6 All enclosures required by conditions O6.4 and O6.5 must be designed and operated to minimise the release of fugitive emissions.

5 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.

M1.2 All records required to be kept by this licence must be:
a) in a legible form, or in a form that can readily be reduced to a legible form;
b) kept for at least 4 years after the monitoring or event to which they relate took place; and
c) produced in a legible form to any authorised officer of the EPA who asks to see them.

Environment Protection Licence

M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
a) the date(s) on which the sample was taken;
b) the time(s) at which the sample was collected;
c) the point at which the sample was taken; and
d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

Air Monitoring Requirements

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
Dry gas density	kilograms per cubic metre	Yearly	TM-23
Moisture	percent	Yearly	TM-22
Molecular weight of stack gases	grams per gram mole	Yearly	TM-23
Solid Particles	milligrams per cubic metre	Yearly	TM-15
Temperature	Celsius	Yearly	TM-2
Type 1 substance	milligrams per cubic metre	Yearly	TM-12
Type 2 substance	milligrams per cubic metre	Yearly	TM-13
Velocity	metres per second	Yearly	TM-2
Volumetric flowrate	cubic metres per second	Yearly	TM-2

M2.3 The monitoring required by condition M2.2 must commence post commissioning of the Hammermill Emission Collection System.

M2.4 The selection of sampling positions for the above air monitoring condition must be selected in accordance with sampling method TM1.

M3 Testing methods - concentration limits

Air Emissions

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Weather monitoring

M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

POINT 12

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Siting	AM-1	-	-	-
Sigma theta	AM-2 & AM-4	Degrees	10 minutes	Continuous
Temperature at 2 metres	AM-4	Kelvin	10 minutes	Continuous
Temperature at 10 metres	AM-4	Kelvin	10 minutes	Continuous
Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	10 minutes	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous
Rainfall	AM-4	millimetres per hour	1 hour	Continuous

M4.2 The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in Condition M4.1.

M4.3 Monitoring of all parameters listed in Column 1 of the table in condition M4.1 must commence by 30 September 2016.

M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M5.2 The record must include details of the following:
a) the date and time of the complaint;
b) the method by which the complaint was made;
c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
d) the nature of the complaint;
e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
f) if no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M7 Other monitoring and recording conditions

Airblast overpressure

M7.1 An airblast overpressure monitor must be operated continuously whilst any activities are being carried out at the premises to measure and electronically record airblast overpressure levels.

M7.2 Instrumentation used to measure and record the airblast overpressure must meet the requirement of Australian Standard AS 2187.2-2006.

M7.3 Explosions resulting in an airblast overpressure reading exceeding 120dB (Linear Peak) must be recorded and reported to the EPA's Environment Line within 24 hours of the explosion. The written record and report of the explosion must include:

a) the time and date of the explosion; and

b) the airblast overpressure for the explosion.

Environment Protection Licence

Licence - 11555

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

R1.3 Where this licence is transferred from the licensee to a new licensee:
a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
a) the licence holder; or
b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

Environment Protection Licence

Licence - 11555

R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
a) where this licence applies to premises, an event has occurred at the premises; or
b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:
a) the cause, time and duration of the event;
b) the type, volume and concentration of every pollutant discharged as a result of the event;
c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other reporting conditions

R4.1 The licensee must complete and submit to the EPA an Annual Waste Summary Report each financial year commencing in 2016/17, comprising the following information:

1. Amount of waste received and removed from the Premises (in tonnes);

2. Waste stream (Municipal, Commercial and Industrial, Construction and Demolition or Other) and waste type (Refer to Table 3.1 of the NSW EPA's Waste Levy Guidelines); and

3. Amount of waste processed to a Resource Recovery Order ("RRO"), if applicable.

R4.2 The Annual Waste Summary Report must be submitted to the EPA via the Waste and Resource Reporting Portal (WARRP) within 60 days of the end of the financial year.

7 General Conditions

G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

8 Special Conditions

E1 Air Emissions Commissioning Reports

Hammermill Emissions Collection System post commissioning assessment and report

E1.1 By 30 September 2016, the licensee must commission the emissions collection system (ECS) for the hammermill.

E1.2 The licensee must verify the air emissions predicted by the ERM Air Quality Assessment report dated September 2015 (the September 2015 ERM Report) from the hammermill. This verification must include:

a) Post commissioning sampling of all pollutants from the hammermill assessed in the September 2015 ERM Report. Sampling must be undertaken by suitably qualified personnel.

b) Estimate of operating capacity and process rate of the activity at the time of sampling and an explanation of how the estimate was arrived at.

c) Sampling of emissions from the hammermill must be undertaken in accordance with the requirements specified in the Approved Methods for Sampling and Analysis of Air Pollutants in NSW or, where no suitable method is prescribed in the Approved Methods for Sampling and Analysis of Air Pollutants in NSW, a method approved in writing by the EPA.

d) Results from post commissioning sampling must be compared with the modelled emissions in the September 2015 ERM Report and demonstrate compliance with the ground level criteria in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW and ground level criteria adopted in the September 2015 ERM Report.

e) Identify and implement any changes to the hammermill ECS necessary to achieve environmental air quality performance commensurate with that set out in the September 2015 ERM Report.

E1.3 By no later than 6 months from the date of the issuing of the Final Occupation Certificate, the licensee must submit to the EPA a Commissioning Report for the verification of air emissions from the hammermill. The Commissioning Report must comprehensively address all requirements listed in Condition E1.1 and E1.2.

Oxy-Cutting post commissioning assessment and report

E1.4 By no later than 6 months from the date of the issuing of the Final Occupation Certificate, the licensee must verify the air emissions predicted by the September 2015 ERM Report from the oxy-cutting activities.

E1.5 The verification required by condition E1.4 must include:

a) Post commissioning sampling of all pollutants from the oxy-cutting activities assessed in the September 2015 ERM Report. Sampling must be undertaken by suitably qualified personnel.

b) Record of the oxy-cutting activities being undertaken at the time of sampling.

c) The sampling method used for emissions from oxy-cutting must be clearly described and justified, and the analytical method referenced.

d) Results from sampling must be compared with the modelled emissions in the September 2015 ERM Report and demonstrate compliance with the ground level criteria in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW.

e) Identify and implement any changes to the oxy-cutting activities necessary to achieve environmental air quality performance commensurate with that set out in the September 2015 ERM Report.

E1.6 By no later than 6 months from the date of the issuing of the Final Occupation Certificate, the licensee must submit a Commissioning Report to the EPA that comprehensively addresses all requirements listed in Condition E1.4 and E1.5.

E2 Post Commissioning Noise Validation Report

E2.1 After the Final Occupation Certificate is issued for the development approved by development consent No. SSD 5041, the licensee must engage a suitably qualified and experienced expert to prepare a post commissioning noise validation report in accordance with Condition L4.5. The report must include an attended noise monitoring assessment carried out for three consecutive operating days, at monitoring point 1 listed in Condition L4.1. The assessment must be carried out during each day, evening and morning shoulder period as defined in Condition L4.2 for a minimum of:

- 1.5 hours during the day;
- 30 minutes during the evening; and
- 1 hour during the morning shoulder.

E2.2 The post commissioning noise validation report must be prepared by a suitably qualified and experienced acoustical consultant and include:

a) an assessment of compliance with noise limits presented in Condition L4.1; and
b) an outline of any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L4.1.

E2.3 The post commissioning noise validation report must be submitted to the EPA within 3 months of the Final Occupation Certificate being issued for the development approved by development consent No. SSD 5041.

Environment Protection Licence

Licence - 11555

Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence

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flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 mo nths. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

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TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste

Ms Juanita Croft

Environment Protection Authority

(By Delegation)

Date of this edition: 16-April-2002

End Notes

1	Licence varied by Admin corrections to archived record, issued on 10-Dec-2002, which came into effect on 10-Dec-2002.
2	Licence varied by notice 1080373, issued on 22-Nov-2007, which came into effect on 22-Nov-2007.
3	Licence varied by notice 1110271, issued on 18-Feb-2010, which came into effect on 18-Feb-2010.
4	Licence varied by notice 1113375, issued on 21-Apr-2010, which came into effect on 21-Apr-2010.
5	Licence varied by notice 1117853, issued on 10-Feb-2011, which came into effect on 10-Feb-2011.
6	Licence varied by notice 1536305 issued on 19-Apr-2016
7	Licence varied by notice 1547799 issued on 10-Jan-2017

APPENDIX H RENZO TONIN SUPPLEMENTARY NOISE AND VIBRATION ASSESSMENTS

RENZO TONIN & ASSOCIATES
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Acoustics
Vibration
Structural Dynamics

KINGS PARK WASTE METAL RECOVERY PROCESSING AND RECYCLING FACILITY

SUPPLEMENTARY NOISE AND VIBRATION IMPACT ASSESSMENT

3 September 2015

SELL & PARKER

TG616-03F01 EIS Supplementary Report (r12).docx

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Document details

Detail	Reference
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Prepared for:	SELL & PARKER
Address:	Sell & Parker Pty Ltd 24 Amelia Street Waterloo NSW 2011
Attention:	Mr Nigel Fox

Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Authorised
16.06.2015	Initial draft for review	0-2		WC	RT	
18.06.2015	Issued to client		3	WC	RT	RT
23.06.2015	Revise vibration section	4		WC	RT	
25.06.2015	Issued to client for comment	5-7		WC	RT	
30.06.2015	Issued to client		8	WC	RT	RT
26.08.2015	Revise for EPA comments	9		WC	RT	
2.09.2015	Checked by RT		10-11	WC	RT	RT
3.09.2015	Final		12	WC	RT	RT

Contents

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1 Introduction

Renzo Tonin & Associates was engaged to conduct a Noise and Vibration Impact Assessment for the proposed expansion of the existing Kings Park Waste Metal Recovery, Processing and Recycling Facility located at 45 Tattersall Road, Kings Park. The purpose of this assessment is to provide an environmental noise and vibration impact assessment of the expanded development affecting neighbouring residential and industrial premises.

This report supplements the initial noise impact report dated 6 June 2014 at the request of the NSW Department of Planning and Infrastructure so as to provide additional material in relation to potential vibration impacts from the operation of the metal shears. A new shear similar to that proposed for the proposed development has come into operation at the proponent's shredding facility in Darwin. The report has also been generally updated as a result of an internal peer review process.

For this project the following work has been undertaken:

- review of preliminary and final drawings of proposed site layout;
- review of all documentation provided for noise and vibration related items;
- site inspection and attended noise measurements;
- vibration measurements of a similar sized shear to that proposed for the development;
- identification of noise criteria and relevant guidelines;
- noise calculations to distant residential and adjacent industrial neighbours;
- assessment of likely noise and vibration impacts from proposed activities on site to neighbours; and
- provision of in-principle acoustic advice, where noise and vibration impacts exceed the recommended criteria.

Noise emissions from this proposed development is assessed to relevant noise criteria set out in the NSW 'Industrial Noise Policy' (INP - Environment Protection Authority 2000) and NSW Road Noise Policy (Environment Protection Authority 2013)

The work documented in this report was carried out in accordance with the Renzo Tonin & Associates Quality Assurance System, which is based on Australian Standard / NZS ISO 9001. Appendix A contains a glossary of acoustic terms used in this report.

2 Project description

Sell & Parker currently operates the Kings Park Waste Metal Recovery Processing and Recycling Facility at 45 Tattersall Road, Kings Park. The project proposal is to expand the facility to 23-43 Tattersall Road, the adjoining property to the east of the existing site, and increase approved capacity from 90,000 tonnes a year to 350,000 tonnes a year.

The changes to the proposed development, compared to the current and original proposal, mainly involve the reconfiguration of existing operations and expansion of the site on to the adjoining allotment to improve site safety and efficiency, improve traffic flow and reduce off-site traffic.

Operating hours sought are 6am to 9pm, Monday to Saturday.

A concept plan for the modified site is presented in Figure 1 below.

In summary, the proposed development is as follows:

- The existing office will be demolished and relocated to improve safety and improve access to the shredder. The office functions will be relocated to the existing office situated at the front of the expanded site (23 Tattersall Road) to isolate pedestrians from the operational activities on the site;
- Car parking for staff and visitors will be increased and moved adjacent to the new office on the expanded site and isolated from the processing area of the facility;
- The pre-shedder will be relocated to where the shear is currently located;
- The existing shear will be replaced by an upgraded shear similar to that currently operating at the Sell & Parker Darwin site;
- The existing post shredder, non-ferrous recovery processing plant will be enclosed under a roof to improve efficiency and reduce potential for noise and dust nuisance;
- Parts of the existing building at 23 Tattersall Road will be demolished to make way for better circulation through the site;
- Additional post shredder processing will be introduced to further extract remaining recyclables (metals and plastics) from Floc material. This will involve conveying the Floc via an enclosed conveyor after shredding to inside one of the existing buildings on the expanded site (the Post Shredder Processing facility). The additional processing and storage of all Floc will be located inside and hence reduce potential for noise and dust nuisance;
- The non-ferrous shed and non-ferrous processing plant will be relocated inside the remaining buildings on the expanded site to improve efficiency and reduce potential for noise and dust nuisance;
- Maintenance shed/work shed will be relocated to old non-ferrous shed on existing site;

- The existing driveway entry at 23 Tattersall Road will be used for non-ferrous retail customers so that they are kept isolated from the processing area of the facility;
- The current Sell and Parker entry driveway will be widened so that two lanes of traffic can enter side by side at any time with two weighbridges installed so two customers can be served at the one time;
- The current exit driveway at 23 Tattersall Road will be widened and two weighbridges installed to handle traffic;
- The current exit driveway on 45 Tattersall Road will be closed and excavated to provide additional finished goods storage;
- Part of the existing sound barrier wall and some vegetation will be removed between the two lots; and
- A new truck wash facility will be installed within the existing building on the expanded site.

Figure 1: Project concept plan

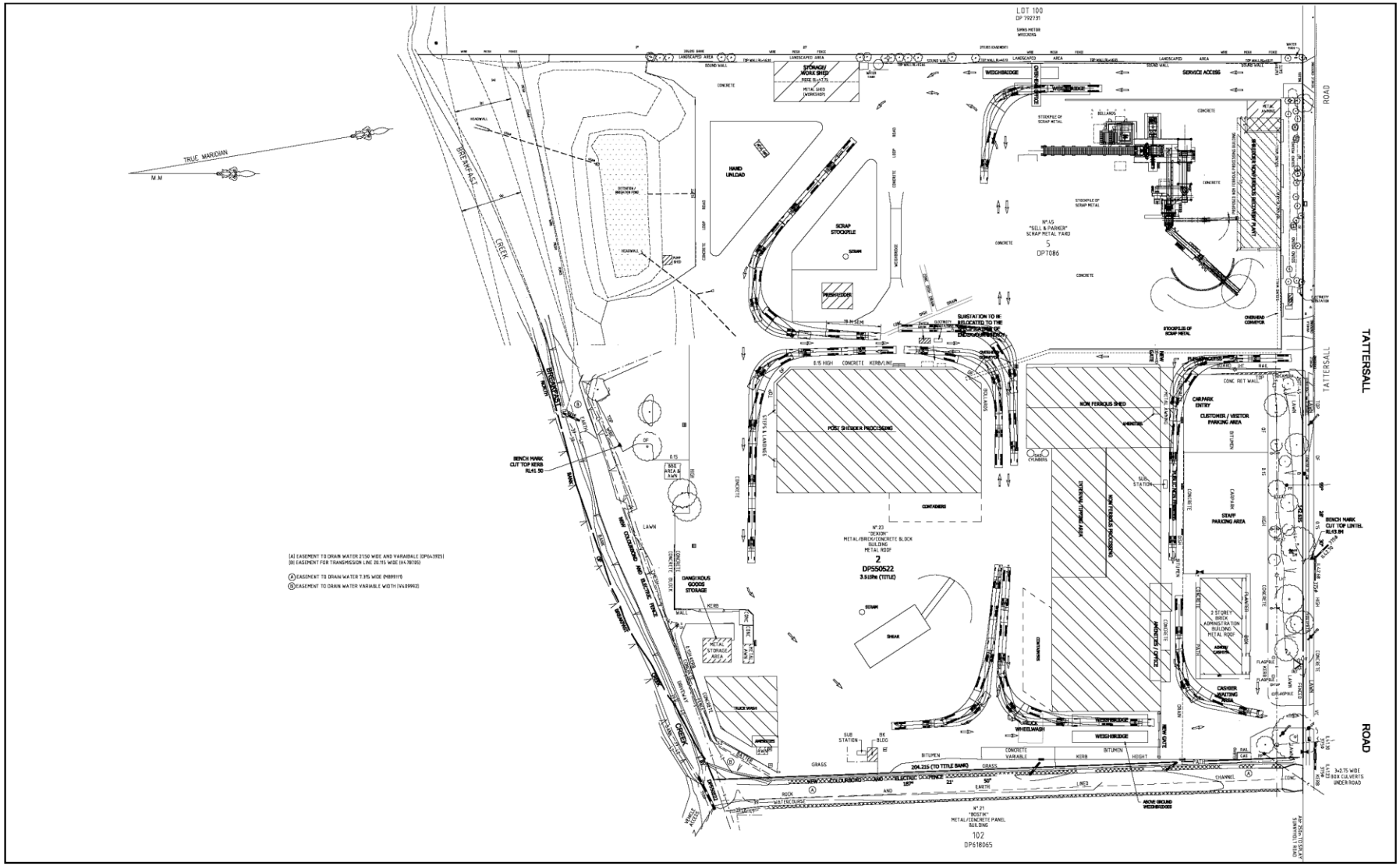

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Figure 1 - Project Concept Plan

Project:
TG616-03 Sell & Parker Blacktown

Date: 12-06-2015
Ref: TG616-03-P01 (r0)
Scale: NTS

3 Noise sensitive receivers and industrial receivers

The following residential receivers are potentially affected by noise from the site.

- **Receiver R1 – 189 Sunnyholt Road**
  Residential receiver located approx. 315m east of the expanded facility and considered representative of the nearest affected receivers along Sunnyholt Road.
- **Receiver R2 – 17 Camorta Close**
  Residential receiver located approx. 650m north of the expanded facility and considered representative of the nearest affected receivers along Camorta Close.
- **Receiver R3 – 3 Railway Road**
  Residential receiver located approx. 830m west of the expanded facility and considered representative of the nearest affected receivers along Railway Road.

The following lists adjacent industrial receptors:

- **Receiver R4 – 38 Tattersalls Road**
  Industrial receiver to the north of the expanded facility across from Tattersalls Road.
- **Receiver R5 – 57-69 Tattersalls Road**
  Industrial receiver to the west of the expanded facility sharing a common site boundary.
- **Receiver R6 – 21 Tattersalls Road**
  Industrial receiver to the east of the expanded facility sharing a common site boundary.
- **Receiver R7 – 38 Forge Street**
  Industrial receiver to the south of the expanded facility across Breakfast Creek.

These locations are depicted in Figure 2 below.

Figure 2: Location of subject site, residential and industrial receivers and noise monitoring locations

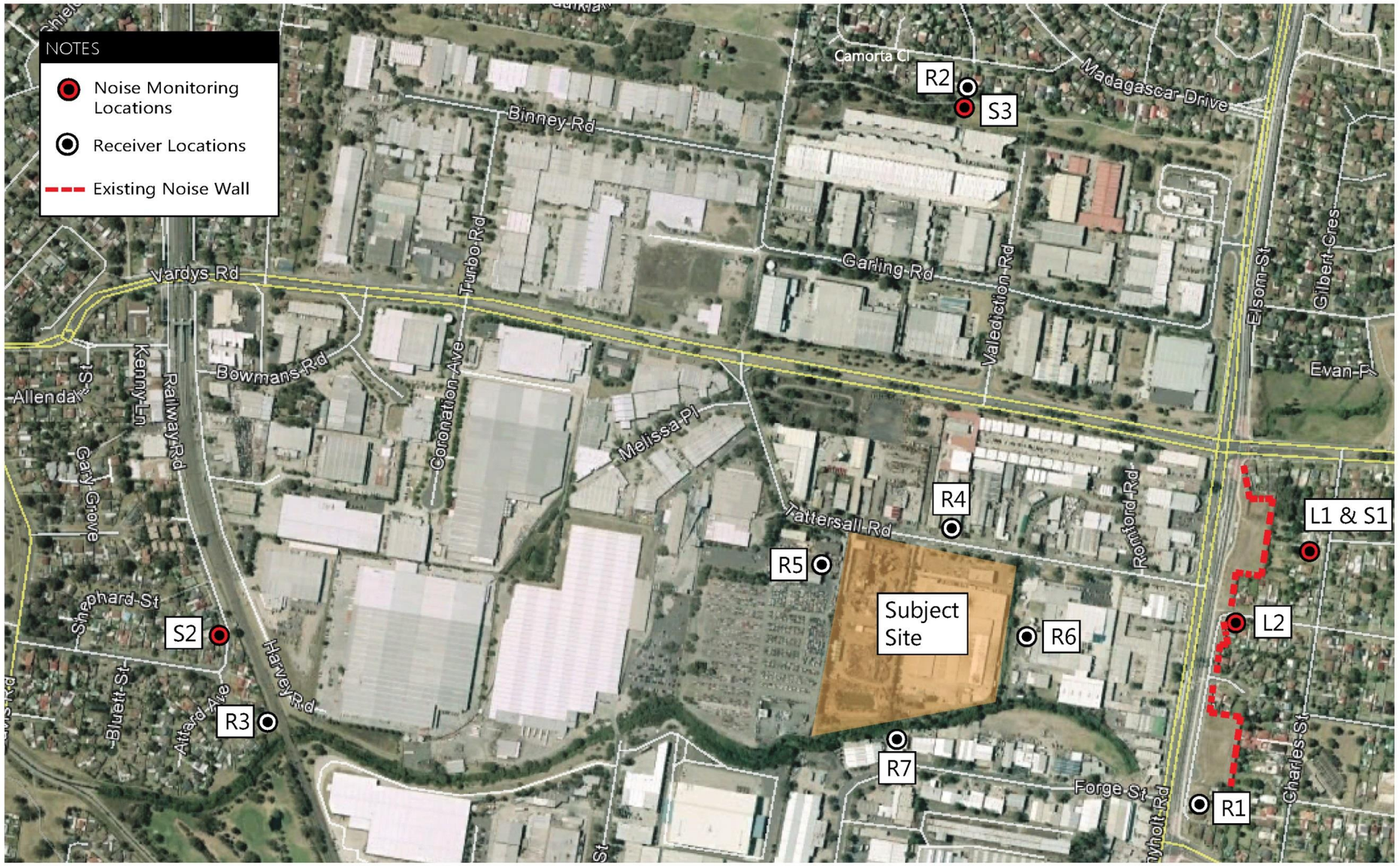

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Figure 2 - Site, noise monitoring and receiver locations

Project:
TG616-03 Sell & Parker Blacktown

Date: 16-06-2015 Ref: TG616-03-P02 (r1) Scale: NTS

4 Existing acoustic environment

Criteria for the assessment of operational noise are usually derived from the existing noise environment of an area, excluding noise from the subject development.

Appendix B of the NSW EPA 'Industrial Noise Policy' (INP) outlines two methods for determining the background noise level of an area, being 'B1 – Long-term background noise method' and 'B2 – Short-term background noise method'. This assessment has used a combination of long-term unattended and short-term attended noise monitoring.

As the noise environment of an area varies over time, background and ambient noise levels need to be determined for the operational times of the proposed development. For example, in a suburban or urban area the noise environment is typically at its minimum at 3am in the morning and at its maximum during the morning and afternoon traffic peak hours. The INP outlines the following standard time periods over which the background and ambient noise levels are to be determined:

- **Day:** 07:00-18:00 Monday to Saturday and 08:00-18:00 Sundays & Public Holidays
- **Evening:** 18:00-22:00 Monday to Sunday & Public Holidays
- **Night:** 22:00-07:00 Monday to Saturday and 22:00-08:00 Sundays & Public Holidays

4.1 Noise measurement locations

Noise measurements are ideally carried out at the nearest or most potentially affected locations surrounding a development. Alternatively, representative locations should be established in the case of access restrictions or a safe and secure location cannot be identified. Furthermore, representative locations may be established in the case of multiple receivers as it is usually impractical to carry out measurements at all locations surrounding a site.

The locations of the long-term unattended and short-term attended measurement are identified in Table 4.1 below and depicted in Figure 2 above.

Table 4.1 – Noise measurement locations

ID	Location	Description
Long-term unattended noise monitoring (provided by Environmental Resources Management Australia Pty Ltd)		
L1	1/50 Charles Street	The noise monitor was located in the 'free-field'. The noise monitoring location is considered representative of residential receiver locations along Sunnyholt Road.
L2	2 Anthony Street	The noise monitor was located in the 'free-field'. The noise monitoring location was supplementary for residential receiver locations along Sunnyholt Road.
Short-term attended noise monitoring (Renzo Tonin & Associates)		
S1	50 Charles Street - Kerb side	Short term attended noise measurements were conducted in the 'free field'. The noise monitoring location was selected to provide a correlation with the long term noise monitoring at Location L1.
S2	6 Railway Road - Kerb side	Short term attended noise measurements were conducted in the 'free field'. The noise monitoring location was selected to provide a correlation between the long term noise monitoring at Location L1 to the residential receivers along Railway Road.
S3	17 Camorta Close (southern side of southern site boundary)	Short term attended noise measurements were conducted in the 'free field'. The noise monitoring location was selected to provide a correlation between the long term noise monitoring at Location L1 to residential receivers along Camorta Close.

It is noted that the long term unattended noise level data reported herein was provided by Environmental Resources Management Australia Pty Ltd (ERM). The original data was re-analysed for the purpose of this report according to the guidelines contained in the INP.

The long term unattended noise monitoring was conducted with the subject site operating but site visits by Renzo Tonin & Associates on Thursday 6th February 2014 and Thursday 4th June 2015 (described in more detail below) confirm that noise from existing site operations does not contribute in any significant way to the measured background noise level at the monitoring locations. In support of this conclusion are the following observations:

i. the separation distance between the site and sensitive receivers;

ii. the acoustic shielding afforded by the intervening industrial buildings;

iii. the dominance of traffic noise from Sunnyholt Road; and,

iv. the acoustic shielding provided by the interposed 4.2m high traffic noise barriers on Sunnyholt Road the locations of which are shown in Figure 2.

4.2 Long-term unattended noise measurement results

Long-term unattended noise monitoring was carried out by ERM from Tuesday 17th December 2013 to Tuesday 24th December 2013. The results of the long term monitoring were analysed and noise level-vs-time graphs of the data were developed and are annexed in Appendix B.

Table 4.2 presents the overall single Rating Background Levels (RBL) and representative ambient L_{Aeq} noise levels for each assessment period, determined in accordance with the INP.

Table 4.2 – Long-Term Noise Monitoring Results, dB(A)

Monitoring Location	L_{A90} Rating Background Noise Level (RBL)				L_{Aeq} Ambient Noise Levels			
	Shoulder[1]	Day[2]	Evening[3]	Night[4]	Shoulder[1]	Day[2]	Evening[3]	Night[4]
L1 - 1/50 Charles Street	43	41	45	40	49	58	55	48
L2 - 2 Anthony Street	45	44	44	35	52	52	50	48

Notes:
1. Shoulder 06:00-07:00 Monday to Saturday
2. Day: 07:00-18:00 Monday to Saturday and 08:00-18:00 Sundays & Public Holidays
3. Evening: 18:00-22:00 Monday to Sunday & Public Holidays
4. Night: 22:00-07:00 Monday to Saturday and 22:00-08:00 Sundays & Public Holidays
5. As required by the INP, the external ambient noise levels presented are free-field noise levels. [ie. no façade reflection]

Given that the expanded facility will operate between 6am and 9pm from Monday to Saturday, only the shoulder, day and evening periods are assessed in this report.

4.3 Short-term attended noise measurement results

4.3.1 Noise survey Thursday 6th February 2014

Short-term attended noise measurements were undertaken during the daytime of Thursday 6th February 2014, in order to supplement the long-term noise monitoring and provide greater detail of the surrounding noise environment.

The equipment used for the short term noise measurements were two Brüel & Kjær Type 2250 precision sound level analysers which are Class 1 instruments having accuracies suitable for field and laboratory use. The instruments were calibrated prior and subsequent to measurements using a Bruel & Kjaer Type 4231 calibrator. No significant drift in calibration was observed. All instrumentation complies with AS IEC 61672.1 2004 'Electroacoustics - Sound Level Meters' and carries current NATA certification (or if less than 2 years old, manufacturers certification).

A summary of the short-term measurement results are presented in Table 4.3.

Table 4.3 – Short-term attended noise monitoring results for Thursday 6th February 2014

Location / Time	Time	Measured Noise Level, dB(A)		Comments on Measured Noise Levels
		L_{Aeq}	L_{A90}	
S1 – 50 Charles Street	2:34pm - 2:49pm	57	43	Dominant noise source at this location was traffic noise from Sunnyholt Road.
S2 – 6 Railway Road		60	46	Dominant noise source at this location was traffic noise along Railway Road, rail movements along adjacent railway line and some industrial noise audible from the Blacktown industrial area but not measureable.
S1 – 50 Charles Street	2:59pm - 3:14pm	57	42	Dominant noise source at this location was traffic noise from Sunnyholt Road.

Location / Time	Time	Measured Noise Level, dB(A)		Comments on Measured Noise Levels
		L_{Aeq}	L_{A90}	
S3 – 17 Camorta Close		47	45	Dominant noise source at this location was distant traffic noise and some industrial noise audible from the Blacktown industrial area but not measureable.

4.3.2 Noise survey Thursday 4th June 2015

Supplementary short-term attended noise measurements were undertaken during the daytime of Thursday 4th June 2015, in order to provide greater detail of the surrounding noise environment.

The equipment used for noise measurements was an NTi Audio Type XL2 precision sound level analyser which is a class 1 instrument having accuracy suitable for field and laboratory use. The instrument was calibrated prior and subsequent to measurements using a Bruel & Kjaer Type 4231 calibrator. No significant drift in calibration was observed. All instrumentation complies with IEC 61672 (parts 1-3) 'Electroacoustics - Sound Level Meters' and IEC 60942 'Electroacoustics - Sound calibrators' and carries current NATA certification (or if less than 2 years old, manufacturers certification).

A summary of the short-term measurement results are presented in Table 4.3.

Table 4.4 – Short-term attended noise monitoring results for Thursday 4th June 2015

Location / Time	Time	Measured Noise Level, dB(A)		Comments on Measured Noise Levels
		L_{Aeq}	L_{A90}	
R1 – 189 Sunnyholt Road	1:30pm - 1:45pm	62	55	The measurement location was not behind the 4.2m traffic noise barrier and had line of sight to Sunnyholt Road. Dominant noise sources at this location were traffic noise from Sunnyholt Road and noise from the BP service station workshop located directly across on Sunnyholt Road including intermittent noise from ratchet guns, saws and general impact noise (bangs). Some distant construction noise audible from a construction site on Anthony Street, to the north, but not measureable. Noise from the Sell & Parker Kings Park site was inaudible throughout the measurement period.
	1:45pm - 2:00pm	64	55	
	2:00pm - 2:15pm	64	58	
S3 – 17 Camorta Close	2:31pm - 2:46pm	47	44	Dominant noise source at this location was distant traffic noise and some industrial noise audible from the Blacktown industrial area but not measureable. Noise from the Sell & Parker Kings Park site was inaudible throughout the measurement period.

An attempt to conduct attended measurements at measurement location S1 was aborted due to the influence of extraneous noise from concreting works at a nearby construction site on Anthony Street.

4.3.3 Summary of short-term attended noise measurement results

Based on the simultaneous short-term attended noise monitoring results presented in Table 4.3, a correlation factor of 3dB was determined for the L_{A90} between the monitoring locations S1 and S2 and between location S1 and S3. The correlation factor is then applied to the long-term unattended noise monitoring results and the correlated Rating Background Noise Level results for Railway Road and Camorta Close are presented in Table 4.5.

Table 4.5 – Correlated noise monitoring results

Monitoring Location	L_{A90} Rating Background Noise Level (RBL)			
	Shoulder[1]	Day[2]	Evening[3]	Night[4]
S2 – 6 Railway Road	46	44	48	43
S3 – 17 Camorta Close	46	44	48	43

Notes:
1. Shoulder 06:00-07:00 Monday to Saturday
2. Day: 07:00-18:00 Monday to Saturday and 08:00-18:00 Sundays & Public Holidays
3. Evening: 18:00-22:00 Monday to Sunday & Public Holidays
4. Night: 22:00-07:00 Monday to Saturday and 22:00-08:00 Sundays & Public Holidays
5. As required by the INP, the external ambient noise levels presented are free-field noise levels. [ie. no façade reflection]

It is acknowledged that the RBLs determined for locations S2 and S3 are approximate only however, as confirmed below, they are separated from the subject site by such a large distance that noise impacts are well below the nominated criteria. Accordingly, it is not necessary to determine more precise background noise levels at these locations.

5 Meteorology

The NSW EPA's INP recommends that project noise criteria are to apply under weather conditions characteristic of an area. These conditions may include calm, wind and temperature inversions. In this regard, the increase in noise that results from atmospheric temperature inversions and wind effects may need to be assessed. The noise levels predicted under characteristic meteorological conditions for each receiver are then compared with the criteria, to establish whether the meteorological effect will cause a significant impact.

The NSW EPA's INP permits two approaches for assessing these effects: use of default parameters and use of site-specific parameters.

- With using default parameters, general meteorological values are used to predict noise levels, foregoing detailed analyses of site-specific meteorological data. This approach assumes that meteorological effects are conservative, in that it is likely to predict the upper range of increases in noise levels. Actual noise levels may be less than predicted.
- The use of site-specific parameters is a more detailed approach, which involves analysing site meteorological data to determine whether inversion and/or wind effects are significant features warranting assessment. Where assessment is warranted, default parameters are available for use in predicting noise or, where preferred, measured values may be used instead. The use of site-specific parameters provides a more accurate prediction of noise increases due to meteorological factors, however, is more costly especially if suitable site data is unavailable and long-term meteorological monitoring is required. Existing weather data may be used, provided the site is within a radius of 30 km of the collection point and in the same topographical basin.

For this assessment, the more detailed approach using site-specific meteorological parameters was conducted. Weather data was obtained from the Bureau of Meteorology's automatic weather station installed at the Horsley Park Equestrian Centre, located 12 km south of the subject site, over the period between 2nd June 2014 and 1st June 2015. As the subject site will operate during predominantly day and evening periods, consideration of night time temperature inversions is not required and only wind effects are considered from herein.

5.1 Wind effects

The INP specifies a procedure for assessing the significance of wind effects, and a default wind speed to be used in the assessment where these effects are found to be significant. The procedure requires that wind effects be assessed where wind is a feature of the area.

Wind is considered to be a feature where source-to-receiver wind speeds (at 10 m height) of 0.5 to 3 m/s occur for 30% of the time or more in any assessment period (day, evening and night) in any season. Winds with velocities less than 0.5 m/s (calm conditions) and greater than 3 m/s (at 10 m height), are not included in the calculations of wind occurrence.

Where there is 30% or more occurrence of wind speeds between 0.5 m/s and 3 m/s (source-to-receiver component), then the highest wind speed is used (below 3 m/s) instead of the default. Where there is less than a 30% occurrence of wind between 0.5 m/s and 3 m/s (source-to-receiver component), wind is not included in the noise-prediction calculations.

Analysis of the wind data from the Horsley Park Equestrian Centre automatic weather station was undertaken using the EPA's Noise Enhancement Wind Analysis program to determine if wind is a 'feature' of the area as defined by the INP. The program determines whether there are prevailing source-to-receiver wind conditions. The results of the analysis are presented in Table 5.1 below:

Table 5.1 – Percentage of Wind Records (up to 3 m/s) from Subject Site to Receiver, %

Receiver	Summer		Autumn		Winter		Spring	
	Day	Eve	Day	Eve	Day	Eve	Day	Eve
R1 – Sunnyholt Road	6.9	3.2	15.6	10.1	20.1	22.1	10.7	8.9
R2 – Camorta Close	10.9	21.4	16.9	25.6	14.7	28.9	7.5	21.1
R3 – Railway Road	17.6	**30.8**	10.3	7.6	5.9	2.6	12.0	22.6
R4 – 38 Tattersalls Road	8.7	17.2	17.5	**32.3**	17.4	**36.1**	7.7	18.8
R5 – 57-69 Tattersalls Road	14.6	29.7	12.6	9.0	10.7	7.0	10.1	22
R6 – 21 Tattersalls Road	6.5	5.1	16.9	21.6	23.2	**36.2**	9.1	12.5
R7 – 38 Forge Street	19.2	7.9	14.7	8.9	16.1	11.9	20.3	9.2

Notes 1. **Bold** denotes greater than 30% occurrence of wind between 0.5 m/s and 3 m/s (source-to-receiver component)

The results above indicate that there is greater than 30% occurrence of winds between 0.5 m/s and 3 m/s (source-to-receiver component) for Receivers R3, R4 and R6. Therefore, prevailing wind conditions in accordance with the INP are considered in the noise prediction calculations for Receivers R3, R4 and R6.

6 Criteria

The operation of the proposed expansion of the Kings Park Waste Metal Recovery, Processing and Recycling Facility is assessed to the NSW 'Industrial Noise Policy' (INP – Environment Protection Authority 2000). The INP is used as a guide by the EPA for setting statutory limits in licences for scheduled noise sources.

The INP has two components:

- Controlling intrusive noise impacts, and
- Maintaining noise level amenity for particular land uses for residences and other land uses.

6.1 Intrusive noise impacts

According to the INP, the intrusiveness of a noise source may generally be considered acceptable if the equivalent continuous (energy-average) A-weighted level of noise from the source (represented by the L_{Aeq} descriptor) does not exceed the background noise level measured in the absence of the source by more than 5dB(A). The intrusiveness criterion is summarised as follows:

- $L_{Aeq,15minute}$ ≤ **Rating Background Level (RBL) plus 5dB(A)**

6.2 Protecting noise amenity

The Amenity Criteria are determined in accordance with Chapter 2 of the NSW INP. The INP recommends base acceptable noise levels for various receivers, including residential, commercial, industrial receivers and sensitive receivers such as schools, hospitals, churches and parks. These base noise criteria are then lowered by up to 10dB depending on the extent of existing industrial noise impact upon the receiver. Higher levels of existing industrial noise therefore result in stricter Amenity Criteria applied to any new industrial development. In this way the cumulative impacts of existing and known future industrial noise sources are minimised.

To limit continuing increases in noise levels, the maximum ambient noise level within an area from industrial noise sources should not normally exceed the acceptable noise levels specified in Table 2.1 of the policy, the applicable parts of which are reproduced in Table 6.1 below.

Table 6.1 – Amenity criteria – recommended L_{Aeq} noise levels from industrial sources

Type of Receiver	Indicative Noise Amenity Area	Time of Day	Recommended $L_{Aeq(Period)}$ Noise Level	
			Acceptable	Recommended Maximum
Residence	Suburban	Day	55	60
		Evening	45	50
		Night	40	45
Industrial premises	All	When in use	70	75

Note:
1. Daytime 7.00 am to 6.00 pm; Evening 6.00 pm to 10.00 pm; Night-time 10.00 pm to 7.00 am
2. On Sundays and Public Holidays, Daytime 8.00 am - 6.00 pm; Evening 6.00 pm - 10.00 pm; Night-time 10.00 pm - 8.00 am.
3. The LAeq index corresponds to the level of noise equivalent to the energy average of noise levels occurring over a measurement period.

6.3 Project specific noise goals

In accordance with the INP, noise impact should be assessed in terms of both intrusiveness and amenity. Based on the background and ambient noise monitoring carried out at the nearest affected residential locations, the applicable noise criteria are as follows.

Table 6.2 – Industrial noise criteria for the proposal

Receiver Location	Intrusiveness Criteria, $L_{Aeq,15min}$, dB(A)			Amenity Criteria, $L_{Aeq,period}$, dB(A)		
	Shoulder	Day	Evening	Shoulder	Day	Evening
R1 – Sunnyholt Road	46	46	46	55	55	45
R2 – Camorta Close[1]	49	49	49	55	55	45
R3 - Railway Road[1]	49	49	49	55	55	45
R4 - 38 Tattersalls Road[2]	-	-	-	70	70	70
R5 - 57-69 Tattersalls Road[2]	-	-	-	70	70	70
R6 - 21 Tattersalls Road[2]	-	-	-	70	70	70
R7 - 38 Forge Street[2]	-	-	-	70	70	70

Notes:
1. Intrusiveness criteria determined based on correlation of short term measurements at receiver Locations R2 and R3 with short term measurements at receiver Location R1
2. The daytime amenity criteria has been adopted for the shoulder period 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.
3. Receiver locations R4, R5, R6 and R7 are industrial receivers and only the amenity criteria is applicable to these receivers when in use.

In respect of the residential receivers R1-R3, as existing industrial noise is not measureable at these sites, it is concluded that the level of industrial noise is insignificant and therefore no modifications are applied to the amenity criteria shown in the table above. Comparing the intrusiveness criteria and the amenity criteria, it can be seen that for the shoulder and day period the intrusiveness criteria are more stringent and for the evening period the amenity criterion is more stringent.

In respect of the industrial receivers the amenity noise goals apply at the boundary of the site. In this instance, the subject site is the principle source of noise and there is no cumulative impact from other industries. Therefore, the amenity criteria shown in the table above for receivers R4-R7 are the project specific noise goals.

6.4 Sleep Disturbance

Noise emanating from project has been assessed for its potential to disturb sleep. The NSW EPA (formerly DEC) has made the following policy statement with respect to sleep disturbance:

Peak noise level events, such as reversing beepers, noise from heavy items being dropped or other high noise level events, have the potential to cause sleep disturbance. The potential for high noise level events at night and effects on sleep should be addressed in noise assessments for both the construction and operational phases of a development. The INP does not specifically address sleep disturbance from high noise level events.

Research on sleep disturbance is reviewed in the NSW Road Noise Policy. This review concluded that the range of results is sufficiently diverse that it was not reasonable to issue new noise criteria for sleep disturbance.

From the research, the EPA recognised that the current sleep disturbance criterion of an LA1, (1 minute) not exceeding the LA90, (15 minute) by more than 15 dB(A) is not ideal. Nevertheless, as there is insufficient evidence to determine what should replace it, the EPA will continue to use it as a guide to identify the likelihood of sleep disturbance. This means that where the criterion is met, sleep disturbance is not likely, but where it is not met, a more detailed analysis is required.

The detailed analysis should cover the maximum noise level or LA1, (1 minute), that is, the extent to which the maximum noise level exceeds the background level and the number of times this happens during the night-time period. Some guidance on possible impact is contained in the review of research results in the NSW Road Noise Policy. Other factors that may be important in assessing the extent of impacts on sleep include:

- *how often high noise events will occur*
- *time of day (normally between 10pm and 7am)*
- *whether there are times of day when there is a clear change in the noise environment (such as during early morning shoulder periods).*

The LA1, (1 minute) descriptor is meant to represent a maximum noise level measured under 'fast' time response. The EPA will accept analysis based on either LA1, (1 minute) or LA, (Max).

The NSW EPA confirm that a sleep disturbance criterion of $L_{A1(1min)} \leq L_{A90(15min)} + 15dB(A)$, should only be used as a first step guide and where the criteria is not met, more detailed analysis is required as explained in the text above.

As the subject site only operates from 6:00am to 7:00am during the night time period, the sleep disturbance criteria are only applicable from 6:00am to 7:00am. The sleep disturbance criteria for the project are presented in Table 6.3.

Table 6.3 – Sleep disturbance criteria, dB(A)

Receiver Location	Sleep disturbance criteria, 6:00am - 7:00am, $L_{A1,1minute}$
	$L_{A90(15min)}$ + 15
R1 – Sunnyholt Road	43 + 15 = 58
R2 – Camorta Close [1]	45 + 15 = 60
R3 - Railway Road [1]	45 + 15 = 60

Notes: 1. Intrusiveness criteria determined based on correlation of short term measurements at receiver Locations R2 and R3 with short term measurements at receiver Location R1

7 Predicted noise levels

7.1 Noise sources

7.1.1 Operational noise

A summary of mobile and fixed equipment included in the noise modelling for the expansion, and relevant Sound Power Levels, is provided in Table 7.1. Sound power levels for this assessment were determined based on noise levels recorded on site, previous on-site measurements and data from similar projects.

Table 7.1 – Sound Power Level of proposed plant, dB(A) re 1pW

Plant	Sound Power Level (per item])		Number of items (included in noise model)
	$L_{Aeq,\ 15min}$ dB(A)	L_{Amax} dB(A)	
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	105	110	4

Notes: 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

Renzo Tonin & Associates have been advised by Sell and Parker that the air emissions control system, for the proposed hammer mill, will be designed appropriately so that noise impact to the surrounding sensitive receivers are minimised. Acoustic assessment of the air emissions control system should be undertaken during the detail design of the hammer mill to ensure that the cumulative noise of all equipment does not exceed the applicable criteria at surrounding sensitive receivers.

The mechanical services plant for the site will utilise the existing air-conditioning equipment at 23-43 Tattersalls Road. Noise emissions from the existing air-conditioning equipment will be insignificant compared to the industrial noise sources operating on site as specified in Table 7.1 and would not require further assessment.

7.1.2 Carpark vehicle movement on site

Noise generated by car park activities which may contribute to the overall L_{Aeq} noise level emission from the site includes vehicle doors closing, vehicle engines starting and vehicles moving. To assess this noise, the L_{Aeq} noise levels were determined for the relevant time period based on the number of vehicle activities expected to occur during that period at the nearest affected receiver locations. Sound power level measurements from our database and library files were used for the purpose of this assessment.

The sound power levels of the car park activities are shown in Table 7.2 below.

Table 7.2 – Sound Power Levels of car park activities, dB(A) re 1pW

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

A maximum staff capacity of 82 employees is proposed. Assuming all employees drive to work and arrive/leave within a one hour period, for modelling purposes, the worst case scenario for the car park would include 82 vehicle doors closing, 82 vehicle engine starts and 82 vehicles manoeuvring in the carpark, within a one hour period.

7.2 Predicted noise levels

Noise emissions were predicted by modelling the noise sources, receiver locations, topographical features of the intervening area, and possible noise control treatments using CadnaA (version 4.4) 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.

- The noise prediction models takes into account:
- Location of noise sources and receiver locations;
- Height of sources and receivers;
- Separation distances between sources and receivers;
- Ground type between sources and receivers (soft); and
- Attenuation from barriers (natural and purpose built).

The noise predictions are based on the indicative layout prepared by Lean Lackenby & Hayward dated 10th October 2013, the amended site plan and reconfiguration of existing buildings on the Dexion site at 23 Tattersalls Road.

The following assumptions were made for noise prediction purposes:

- All fixed and mobile plant operating concurrently;
- 4 trucks moving on site concurrently;
- The retained 4m high acoustic screen fencing erected around the existing site's northern and western boundaries and along existing driveways as shown on site drawings and detailed in Section 8.1; and
- New 4m high acoustic screen fencing erected along the new eastern boundary of the expanded site with details of the fence presented in Section 8.1.

Predicted noise levels based on the above assumptions are summarised in Table 7.3 below. Because noise from the site is variable over the day, it is assumed the $L_{Aeq,period}$ is 3dB lower than the worst case $L_{Aeq,15min}$.

In addition meteorological effects have been considered in the predictions for Receivers R3, R4 and R6, as determined in Section 5.1. For Receivers R3, R4 and R6, a "prevailing wind condition" scenario including the default 3 m/s wind from source to receiver has been considered for all assessed time periods.

Table 7.3 – Predicted Noise Level Emission from Site Operations, dB(A)

Source	Intrusive Assessment, $L_{Aeq,15min}$			Amenity Assessment, $L_{Aeq,period}$		
	Shoulder	Day	Evening	Shoulder	Day	Evening
Receiver R1 – Residential Premises to the east - Sunnyholt Road						
Criteria	46	46	46	55	55	45
Cumulative (neutral condition)	46	46	46	43	43	43
Receiver R2 – Residential Premises to the north - Camorta Close						
Criteria	49	49	49	55	55	45
Cumulative (neutral condition)	40	40	40	37	37	37
Receiver R3 – Residential Premises to the west - Railway Road						
Criteria	49	49	49	55	55	45
Cumulative (neutral condition)	34	34	34	31	31	31
Cumulative (prevailing wind condition)	39	39	39	36	36	36
Receiver R4 – Neighbouring Industrial Premises to the north - 38 Tattersalls Road						
Criteria	-	-	-	70	70	70
Cumulative (neutral condition)	-	-	-	58	58	58
Cumulative (prevailing wind condition)	-	-	-	58	58	58
Receiver R5 – Neighbouring Industrial Premises to the west - 57-69 Tattersalls Road						
Criteria	-	-	-	70	70	70
Cumulative (neutral condition)	-	-	-	62	62	62
Receiver R6 – Neighbouring Industrial Premises to the east- 21 Tattersalls Road						
Criteria	-	-	-	70	70	70
Cumulative (neutral condition)	-	-	-	57	57	57
Cumulative (prevailing wind condition)	-	-	-	58	58	58
Receiver R7 – Neighbouring Commercial/Industrial Premises to the south - 38 Forge Street						
Criteria	-	-	-	70	70	70
Cumulative (neutral condition)	-	-	-	61	61	61

On the basis of noise measurements undertaken at Sell & Parker's Blacktown 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.

7.2.1 Sleep disturbance predicted levels

In addition to the above predicted noise levels, Table 7.4 below presents a summary of the predicted L_{Amax} noise levels at residential receivers during the morning shoulder period from 6:00am to 7:00am.

Table 7.4 – Predicted L_{Amax} Noise Level Emission from Site Operations, dB(A)

Receiver Location	Predicted L_{Amax} Noise Level		Sleep disturbance criteria, 6:00am - 7:00am	Complies?
	Neutral Condition	Prevailing wind condition	$L_{A90(15min)}$ + 15	
R1 – Residential Premises to the east - Sunnyholt Road	58	N/A	58	Yes
R2 – Residential Premises to the north - Camorta Close	46	N/A	60	Yes
R3 – Residential Premises to the west - Railway Road	38	44	60	Yes

7.3 Statement of noise impact

Noise impacts exist where the predicted or measured noise level is greater than the project-specific noise levels.

From the results it is shown that noise emission levels to the residential receivers (Receivers R1, R2 and R3) comply with the project-specific noise levels and sleep disturbance criteria without any additional noise mitigation measures.

Furthermore, noise emission levels to the neighbouring industrial receivers (Receivers R4, R5, R6 and R7) comply with the project-specific noise goals.

8 Noise mitigation measures

The following recommendations provide in-principle noise control solutions to reduce noise impacts to residential receivers. This information is presented for approvals and cost planning purposes and is not construction advice. Detailed assistance from an acoustic consultant shall be sought at the detailed design phase of the works. The advice provided here is in respect of acoustics only. Supplementary professional advice may need to be sought in respect of fire ratings, structural design, buildability, fitness for purpose and the like.

8.1 Acoustic screen fencing

The following acoustic screen fencing is proposed as shown on the plans of the proposed facility:

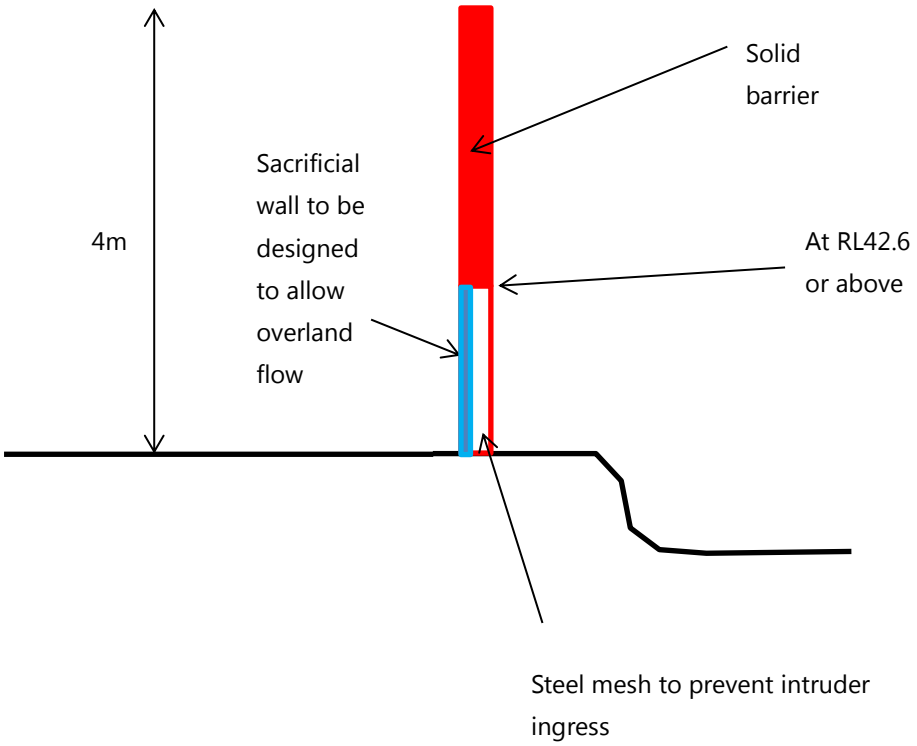
- Retain the existing acoustic screen fencing at a height of 4m, which is currently erected around the existing site northern and western boundary and along the existing driveways as shown on the site drawings; and
- An acoustic fence 4m in height shall be constructed in place of the proposed colorbond and electric fence along the new eastern boundary. Blacktown City Council requires any fencing to the eastern boundary to allow overland flow for a height of a minimum of 0.5m above the 1 in 100 year ARI flood level. As advised by Council on 20th August 2015, the Council's engineers have determined 1 in 100 year flood level of 42.1m AHD is applicable site. Sell and Parker have proposed that the base of the acoustic fence will be a sacrificial wall, constructed of material that can be sacrificed in a flood and will float away with flood waters, up to minimum 42.6m AHD and solid fencing above this height up to a total height of 4m above local ground. Refer to Figure 3.

The construction of acoustic screens can be from any durable material with sufficient mass (min. 15kg/m^2) to prevent direct noise transmission such as aluminium, product, fibrous-cement, timber, polypropylene material, or other appropriate acoustic material or any combination of such materials, provided they withstand the weather elements and for the sacrificial wall, materials can be sacrificed by water flows experienced in a 1 in 100 year flood.

In addition to the above, the noise screen shall be designed with regard to the following:

- The extent of noise reduction required of the noise screen as a whole as perceived from any potentially affected receiver sites.
- Any gaps and penetrations of the noise screen shall be sealed.
- All joints between noise screen panels will be sealed air tight.
- Noise screens will have no clearance gaps underneath them.
- Noise screen will allow overland flow

Figure 3: New eastern boundary wall sketch - elevation view (Not to scale)



9 Road traffic noise assessment

9.1 Road traffic noise criteria

The EPA's 'Road Noise Policy' (RNP) is used to assess the potential traffic noise impact generated from the site's operations. Table 3 – 'Road traffic noise assessment criteria for residential land uses' divides land use developments into different categories and lists the respective criteria for each case.

Based on functionality, Sunnyholt Road is categorised as an 'arterial' road. The potentially affected residential premises are located in the vicinity of Sunnyholt Road, and all have an acoustic environment which is dominated by traffic noise from Sunnyholt Road. Therefore, the appropriate traffic noise criterion for these residences is the 'arterial' road noise criteria presented in Table 9.1.

Table 9.1 – EPA Road Traffic Noise Criteria, dB(A)

Road Category	Type of project/land use	Assessment Criteria, dB(A)	
		Day 7am – 10pm	Night 10pm – 7am
Freeway/arterial/sub-arterial roads	3. Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments	$L_{Aeq(15hr)}$ 60 (external)	$L_{Aeq(9hr)}$ 55 (external)

According to the guidelines, for existing residences affected by additional traffic on existing roads generated by land use developments, any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding 'no build option'. In all cases, traffic arising from the development should not lead to an increase in existing noise levels of more than 2 dB(A).

9.2 Road traffic noise predictions & assessment

Existing annual average daily traffic (AADT) volumes along Sunnyholt Road have been obtained from traffic counting undertaken by the Roads and Maritime Services' (RMS) at a permanent traffic counting station (station no. 69.046) located on Sunnyholt Road at Kings Park, north of Forge Street. The AADT volume is reported to be 40,257 vehicles at the traffic counting station. It is noted that vehicle movements from the subject site would be insignificant (less than 170 vehicles movements per day) in comparison to the AADT along Sunnyholt Road and therefore, the increase in road traffic noise due to traffic generated by the subject site would be insignificant for residential properties currently experiencing noise from Sunnyholt Road.

Furthermore, the additional traffic on Sunnyholt Road as a result of the subject site would not contribute to the existing traffic noise levels from Sunnyholt Road to the affected residences and would be significantly less than the allowable 2 dB(A) increase to existing traffic noise levels.

10 Vibration impact assessment

10.1 Vibration criteria

Vibration levels during the operation of the site will be insignificant at each residential receiver due to the large separation distances between plant and receivers. As such, this report only assesses vibration levels to adjacent industrial premises.

The effects of ground vibration on buildings resulting from construction may be segregated into the following three categories:

1. Disturbance to building occupants - vibration in which the occupants or users of the building are inconvenienced or possibly disturbed,
2. Effects on building contents - vibration where the building contents may be affected; and
3. Effects on building structures - vibration in which the integrity of the building or structure itself may be prejudiced.

In general, vibration criteria for human disturbance (1.) are more stringent than vibration criteria for effects on building contents (2.) and building structural damage (3.). Hence, compliance with the more stringent limits dictated by (1.), would ensure that compliance is also achieved for the other two categories.

10.1.1 Disturbance to buildings occupants

Assessment of potential disturbance from vibration on human occupants of buildings is in accordance with the EPA's '*Assessing Vibration; a technical guideline*' (EPA, 2006). The guideline provides criteria which are based on the British Standard BS 6472-1992 '*Evaluation of human exposure to vibration in buildings (1-80Hz)*'. Sources of vibration are defined as either 'Continuous', 'Impulsive' or 'Intermittent'.

Table 10.1 provides definitions and examples of each type of vibration. Vibration sources are defined as Continuous, Impulsive or Intermittent.

Table 10.1 – Types of Vibration

Type of Vibration	Definition	Examples
Continuous vibration	Continues uninterrupted for a defined period (usually throughout the day-time and/or night-time)	Machinery, steady road traffic, continuous construction activity (such as tunnel boring machinery).
Impulsive vibration	A rapid build-up to a peak followed by a damped decay that may or may not involve several cycles of vibration (depending on frequency and damping). It can also consist of a sudden application of several cycles at approximately the same amplitude, providing that the duration is short, typically less than 2 seconds	Infrequent: Activities that create up to 3 distinct vibration events in an assessment period, e.g. occasional dropping of heavy equipment, occasional loading and unloading.
Intermittent vibration	Can be defined as interrupted periods of continuous or repeated periods of impulsive vibration that varies significantly in magnitude	Trains, nearby intermittent construction activity, passing heavy vehicles, forging machines, impact pile driving, jack hammers. Where the number of vibration events in an assessment period is three or fewer, this would be assessed against impulsive vibration criteria.

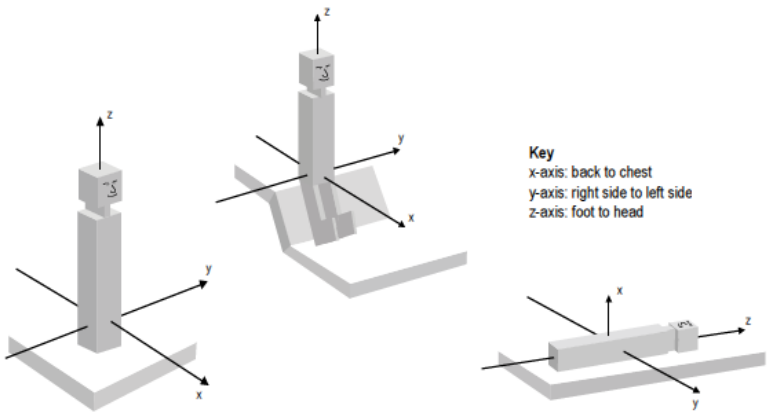
Source: Assessing Vibration; a technical guideline, Department of Environment & Climate Change, 2006

The vibration criteria are defined as a single weighted root mean square (rms) acceleration source level in each orthogonal axis. Section 2.3 of the guideline states:

> *'Evidence from research suggests that there are summation effects for vibrations at different frequencies. Therefore, for evaluation of vibration in relation to annoyance and comfort, overall weighted rms acceleration values of the vibration in each orthogonal axis are preferred (BS 6472).'*

When applying the criteria, it is important to note that the three directional axes are referenced to the human body, i.e. x-axis (back to chest), y-axis (right side to left side) or z-axis (foot to head). Vibration may enter the body along different orthogonal axes and affect it in different ways. Therefore, application of the criteria requires consideration of the position of the people being assessed, as illustrated in Figure 4. For example, vibration measured in the horizontal plane is compared with x- and y-axis criteria if the concern is for people in an upright position, or with the y- and z- axis criteria if the concern is for people in the lateral position.

Figure 4: Orthogonal Axes for Human Exposure to Vibration



The preferred and maximum values for continuous and impulsive vibration impacting on the adjacent industrial premises are defined in Table 2.2 of the guideline and are reproduced in Table 10.2.

Table 10.2 – Preferred and Maximum Levels for Human Comfort

Location	Assessment period[1]	Preferred values		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	Day- or night-time	0.04	0.029	0.080	0.058
Impulsive vibration (Weighted RMS Acceleration, m/s^2, 1-80Hz)					
Workshops	Day- or night-time	0.64	0.46	1.28	0.92

Notes: 1. Daytime is 7:00am to 10:00pm and night-time is 10:00pm to 7:00am

The acceptable vibration dose values (VDV) for intermittent vibration impacting on the adjacent industrial premises are defined in Table 2.4 of the guideline and are reproduced in Table 10.3.

Table 10.3 – Acceptable vibration dose values for intermittent vibration

Location	Daytime[1]		Night-time[1]	
	Preferred value	Maximum value	Preferred value	Maximum value
Workshops	0.80	1.60	0.80	1.60

Notes: 1. Daytime is 7:00am to 10:00pm and night-time is 10:00pm to 7:00am

10.2 Vibration measurements and assessment

In order to quantify the vibration levels from the highest vibration producing plant, attended vibration measurements were undertaken for the hammer mills at the Kings Park site. Vibration measurements were conducted on Friday 9th May 2014, between 10.30am and 11.30am. The measurement location was approximately 10 m from the plant item which corresponds to the distance from the hammer mill to the boundary. Vibration measurements were conducted over 1 minute periods with the plant item operating normally with continuous feed over the time of measurement.

Vibration measurements were also taken for a large metal shear located at the Sell & Parker Darwin plant with a capacity of 350,000 tonnes a year which is similar to that proposed for the Kings Park development. Vibration measurements were conducted on Monday 25th May 2015, between 3.30pm and 6.30pm, and on Tuesday 26th May 2015, between 8:30am and 11:30am. The measurements were conducted at different distances from the plant item over 5 minute periods with the plant item operating continuously with continuous feed over the time of measurement. A distance of 50m corresponds to the distance from the plant item to the boundary.

Vibration levels were measured in three orthogonal axes (x, y and z) using a Sinus Soundbook precision sound and vibration analyser and three PCB Type 393B12 accelerometers or three Endevco Type 61C13 accelerometers. The PCB Type 393B12 accelerometers were calibrated using factory settings. The Endevco Type 61C13 accelerometers were calibrated before and after the measurements using a Bruel & Kjaer Type 4294 calibration exciter. No significant drift in calibration was observed.

Based on the vibration measurements conducted, the vibration sources are classified as continuous and/or intermittent as per the definitions presented in Table 10.1. The vibration sources do not exhibit the characteristics of impulsive vibration and therefore the assessment for impulsive vibration is not considered further from herein.

10.2.1 Hammer mill

The following results were obtained for the hammer mill:

Table 10.4 – Measured vibration levels for the hammer mill

Plant Item	Measurement No.	Approximate distance to plant, m	Measured weighted rms acceleration, m/s^2		
			x-axis	y-axis	z-axis
Hammer Mill [1] (9th May 2014)	1	10	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

Notes: Measured vibration levels for the hammer mill include the operation of the shaker

For the table above it can be seen that vibration levels from the existing Kings Park hammer mill in the x and y axes are up to 0.001 m/s^2 and in the z axis up to 0.007 m/s^2 when at 10 m from the plant. When assessed against the established vibration criteria presented in Table 10.2, the measured vibration levels comply with the preferred limits for continuous vibration of 0.029 m/s^2 in the x and y axes and the preferred limit of 0.04 m/s^2 in the z axis.

The operation of the hammer mill is also assessed against the intermittent vibration criteria and the results are presented in the table below:

Table 10.5 – Measured intermittent vibration levels for hammer mill

Plant Item	Measurement No.	Approximate distance to plant, m	Measured vibration dose value, $m/s^{1.75}$
Hammer Mill (9th May 2014)	1	10	0.025
	2		0.025
	3		0.023
	4		0.023
	5		0.021
	6		0.023

Based on the measured vibration dose value in in Table 10.5 the estimated vibration dose value over the daytime (7:00am to 10:00pm) is 0.13 $m/s^{1.75}$ and the estimated vibration dose value over the night-time (10:00pm to 7:00am) 0.06 $m/s^{1.75}$. It is noted that the plant operates only from 6:00am to 9:00pm. When assessed against the established vibration criteria presented in Table 10.3, the estimated vibration dose

values comply with the preferred limits for intermittent vibration of 0.80 $m/s^{1.75}$ for both day and night periods.

Given that the measured vibration levels were measured at approximately 10 m from the hammer mill and the nearest industrial receiver is in excess of 30 m from the hammer mill, it is not expected that vibration levels in the z axis will exceed the preferred limits for continuous vibration at the nearest receivers. Therefore, vibration levels from the operation of the hammer mill will comply with the applicable vibration criteria at nearby receivers.

10.2.2 Metal shear

The following results were obtained for the metal shear located at the Darwin site:

Table 10.6 – Measured continuous vibration levels for metal shear

Plant Item	Measurement No.	Approximate distance to plant, m	Measured weighted rms acceleration, m/s^2		
			x-axis	y-axis	z-axis
Metal Shear (25th & 26th May 2015)	1	5.5	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	9 (rear of metal shear)	0.012	0.003	0.003
	8		0.008	0.002	0.005
	9		0.008	0.002	0.002
	10	50	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

It can be seen from the above table that vibration levels in the x and y axes are up to 0.018 m/s^2 and in the z axis up to 0.001 m/s^2 when at 50 m from the plant. When assessed against the established vibration criteria presented in Table 10.2, the measured vibration levels comply with the preferred limits for continuous vibration of 0.029 m/s^2 in the x and y axes and the preferred limit of 0.04 m/s^2 in the z axis.

The operation of the metal shear is also assessed against the intermittent vibration criteria and the results are presented in the table below at a distance of 50m:

Table 10.7 – Measured intermittent vibration levels for metal shear

Plant Item	Measurement No.	Approximate distance to plant, m	Measured vibration dose value, $m/s^{1.75}$
Metal Shear (25th & 26th May 2015)	10	50	0.017
	11		0.194
	12		0.270
	13		0.166

Based on the measured vibration dose value in in Table 10.6 the estimated vibration dose value over the daytime (7:00am to 10:00pm) is 0.75 $m/s^{1.75}$ and the estimated vibration dose value over the night-time (10:00am to 7:00am) 0.39 $m/s^{1.75}$. It is noted that the plant operates only from 6:00am to 9:00pm. When assessed against the established vibration criteria presented in Table 10.3, the estimated vibration dose values comply with the preferred limits for intermittent vibration of 0.80 $m/s^{1.75}$ for both day and night periods.

The metal shear at the subject site will be located in excess of 50 m from the boundary of the nearest adjoining industrial premises. The measured vibration levels from the Darwin site shows compliance with the vibration criteria for both continuous vibration and intermittent vibration at 50 m. It is noted that the foundations of the metal shear at the Darwin site are embedded in rock and the surrounding soil is hard, unlike the geology of the Kings Park site which consists of soft clayey soil. The vibration levels from the new metal shear at the subject site are expected to be lower than the measured levels accounting for the ground impedance of softer ground at the subject site. Therefore, vibration levels from the operation of the metal shear will comply with the applicable vibration criteria at nearby receivers.

11 Conclusion

An assessment of environmental noise impact from the proposed expansion of the Kings Park Waste Metal Recovery, Processing and Recycling Facility has been made.

Noise impact from the proposed expansion upon the potentially most affected noise sensitive residential locations and existing and future neighbouring industrial premises, has been quantified and compared to the noise guidelines set by the EPA.

Noise emissions to residential premises are predicted to comply with the project-specific noise levels without noise mitigation measures.

Noise and vibration emissions from site operations to neighbouring industrial premises also comply with the project-specific noise levels and sleep disturbance criteria, once the noise mitigation measures proposed in Section 8, as part of the expansion, are implemented.

Potential traffic noise associated with the operation of the facility and impacting nearby residential receivers is assessed as being insignificant and would comply with the relevant EPA noise policy.

In summary, noise and vibration emissions from the construction and operation of the proposed expansion will comply with the relevant requirements of the NSW EPA.

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 115dB Limit of sound permitted in industry 120dB Deafening
dB(A)	A-weighted decibels. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L_{Max}	The maximum sound pressure level measured over a given period.
L_{Min}	The minimum sound pressure level measured over a given period.

L_1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L_{10}	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L_{90}	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).
L_{eq}	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

APPENDIX B Long term unattended noise monitoring results

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Background & Ambient Noise Monitoring Results - NSW 'Industrial Noise Policy', 2000						
	L_{A90} Background Noise Levels[5]			L_{Aeq} Ambient Noise Levels		
Date	**Day**	**Evening**	**Night**	**Day**	**Evening**	**Night**
Tuesday-17-December-2013	44.2	43.4	35.4	53.4	49.5	48.7
Wednesday-18-December-2013	44.1	43.4	34.9	52.2	51.4	48.0
Thursday-19-December-2013	44.2	43.6	36.6	52.8	50.7	47.9
Friday-20-December-2013	43.9	44.2	38.5	52.1	50.1	47.8
Saturday-21-December-2013	42.4	41.7	34.0	51.0	49.0	46.0
Sunday-22-December-2013	42.6	43.5	35.2	51.2	49.5	47.2
Monday-23-December-2013	45.0	44.2	33.6	52.8	50.2	47.1
Tuesday-24-December-2013	44.3	-	-	50.5	-	-
Representative Weekday	**44.2**	**43.6**	**35.4**	**52.4**	**50.4**	**47.9**
Representative Weekend	**42.5**	**42.6**	**34.6**	**51.1**	**49.2**	**46.7**
Representative Week	**44.2**	**43.5**	**35.2**	**52.1**	**50.1**	**47.6**

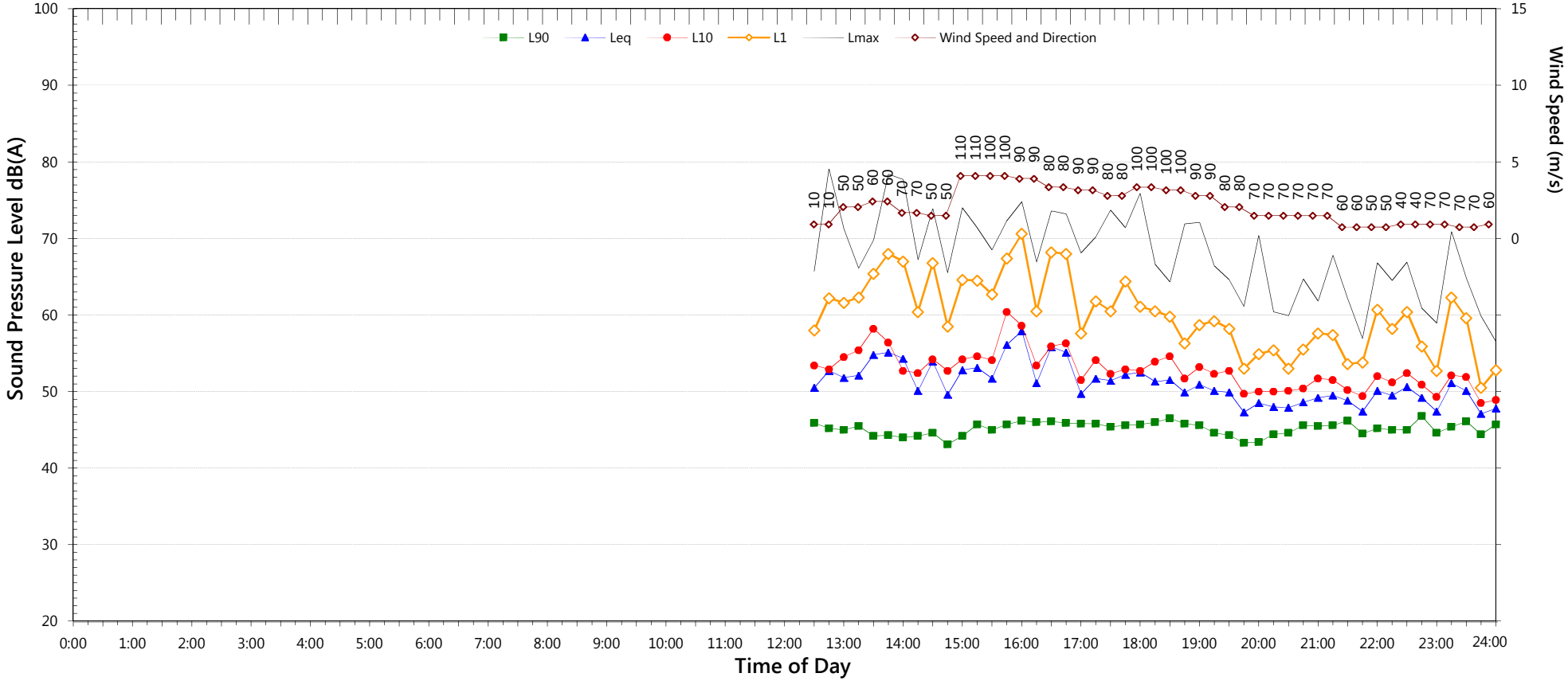
Notes:

1. Day is taken to be 7:00am to 6:00pm
2. Evening is taken to be 6:00pm to 10:00pm.
3. Night is taken to be the remaining periods.
4. Rating Background Level (RBL) for L90 and logarithmic average for Leq
5. Assessment Background Level (ABL)
6. Rating Background Level (RBL) for L90 and logarithmic average for Leq

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Tuesday, 17 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.2	43.4	35.4
Leq	53.4	49.5	48.7

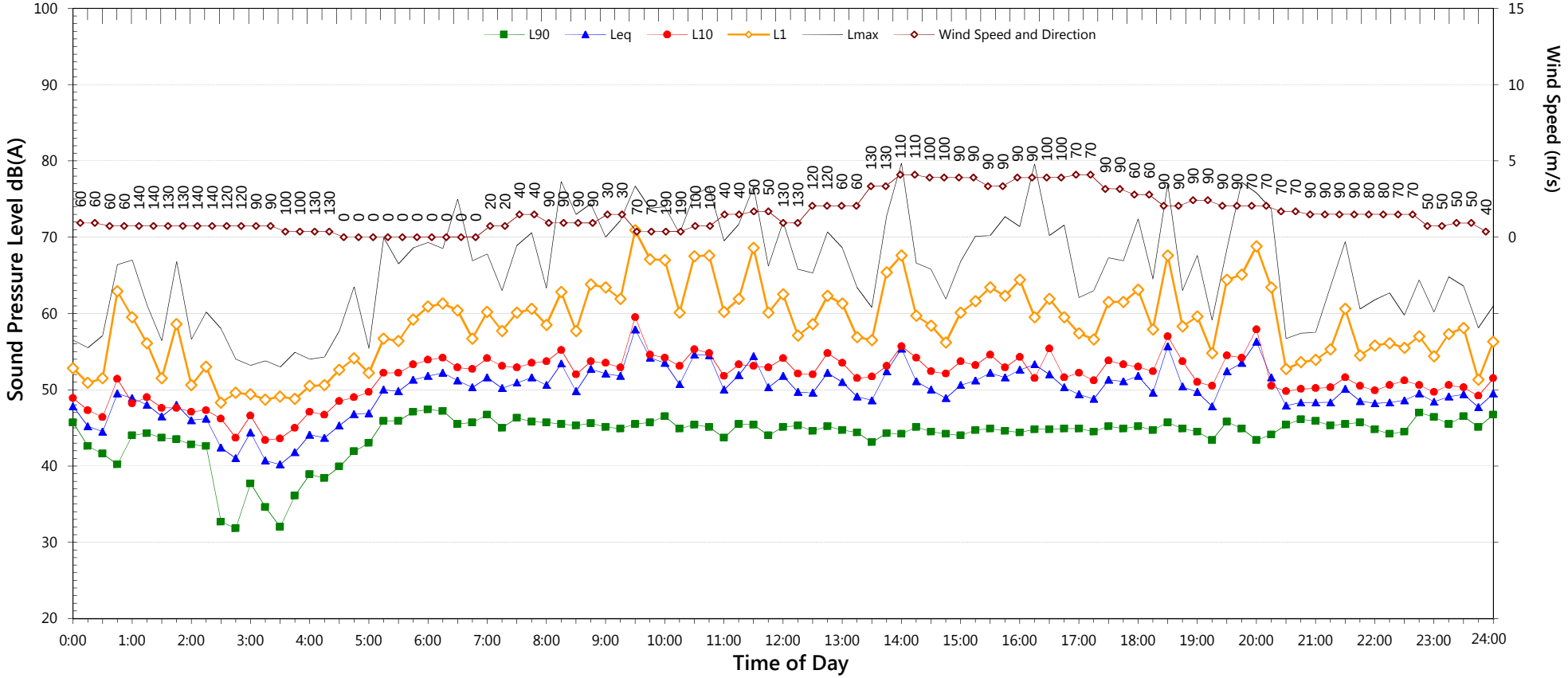
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Wednesday, 18 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.1	43.4	34.9
Leq	52.2	51.4	48.0

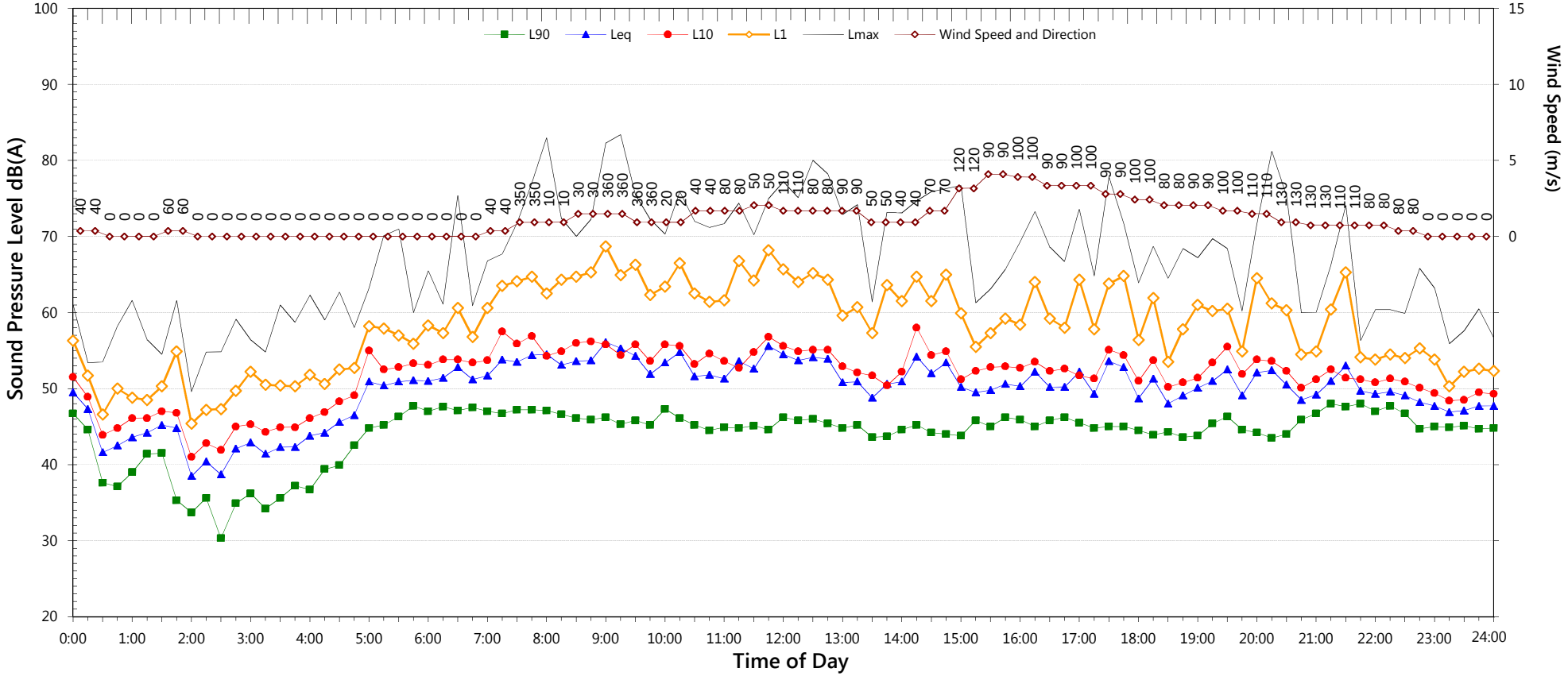
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Thursday, 19 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.2	43.6	36.6
Leq	52.8	50.7	47.9

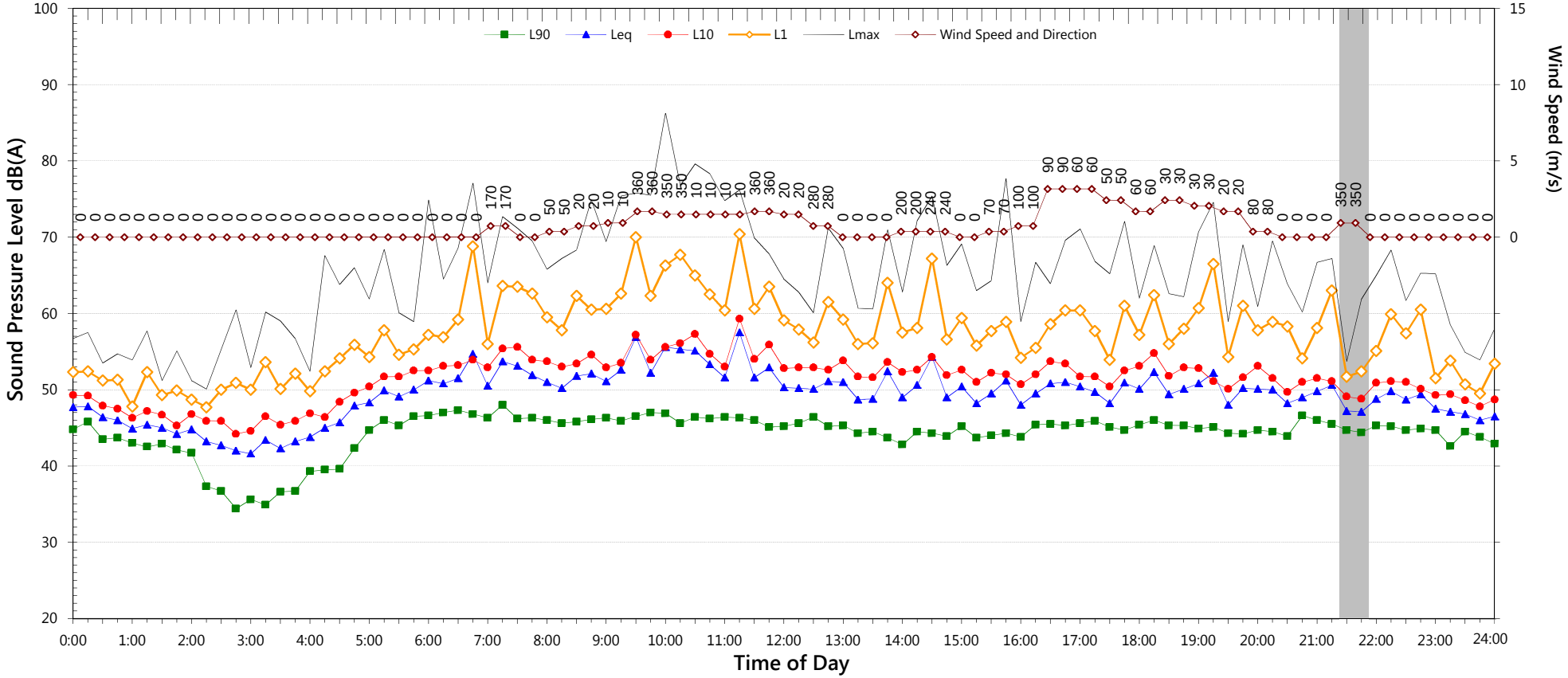
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Friday, 20 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	43.9	44.2	38.5
Leq	52.1	50.1	47.8

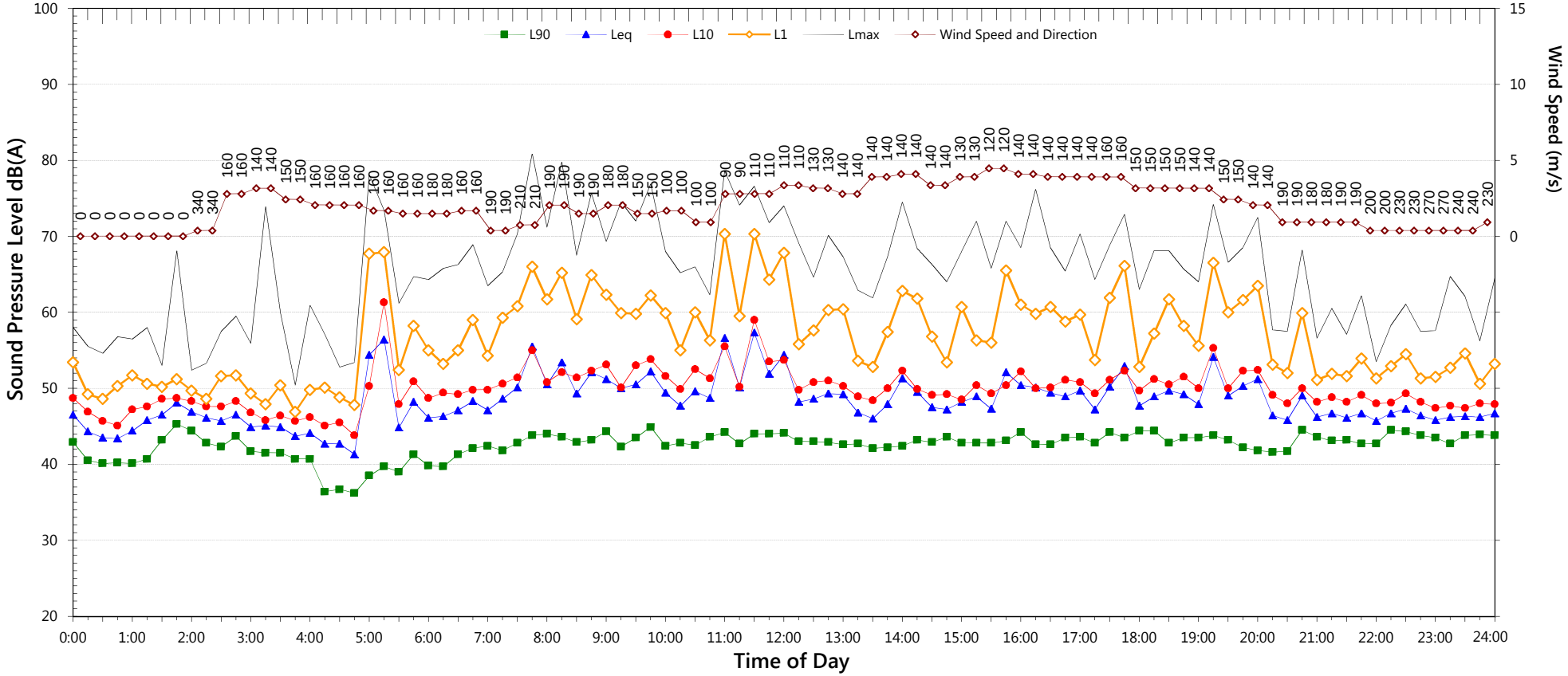
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Saturday, 21 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	42.4	41.7	34.0
Leq	51.0	49.0	46.0

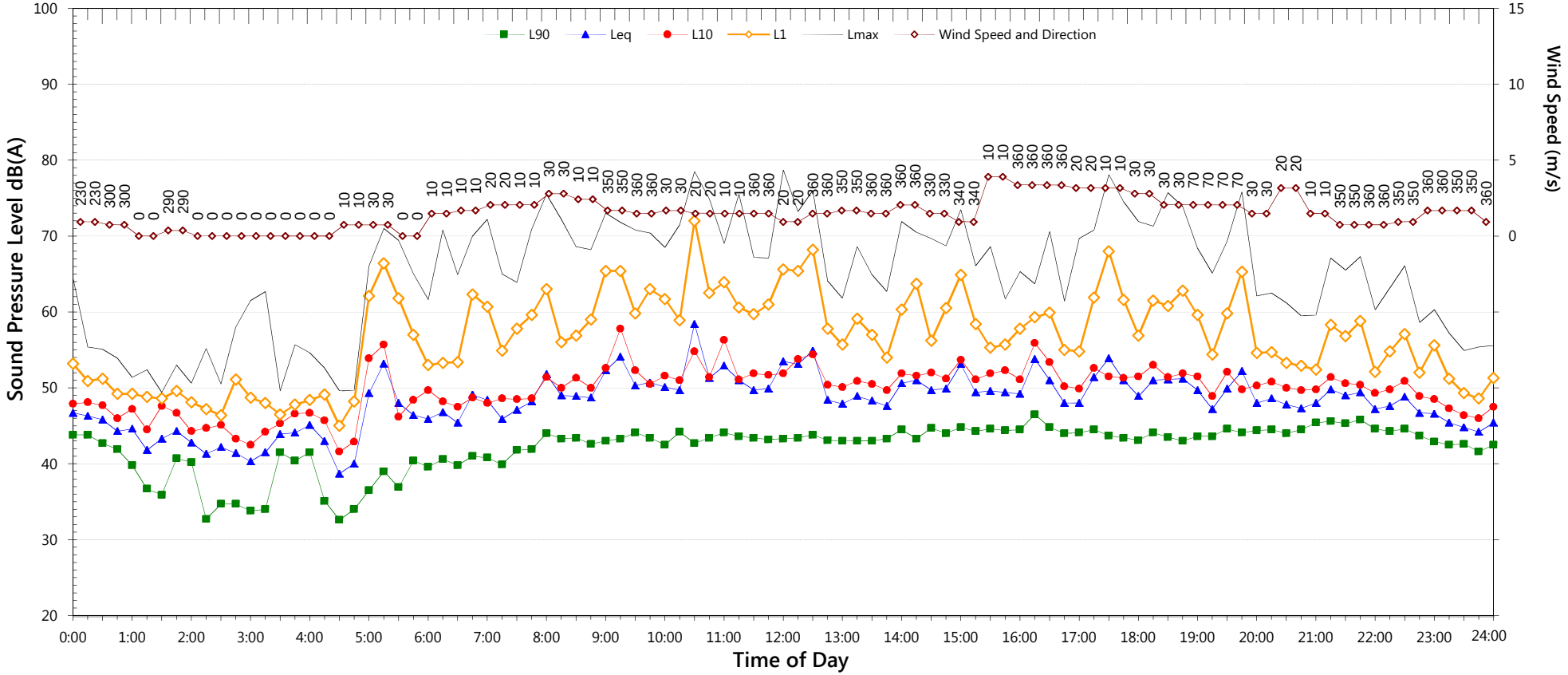
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Sunday, 22 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	42.6	43.5	35.2
Leq	51.2	49.5	47.2

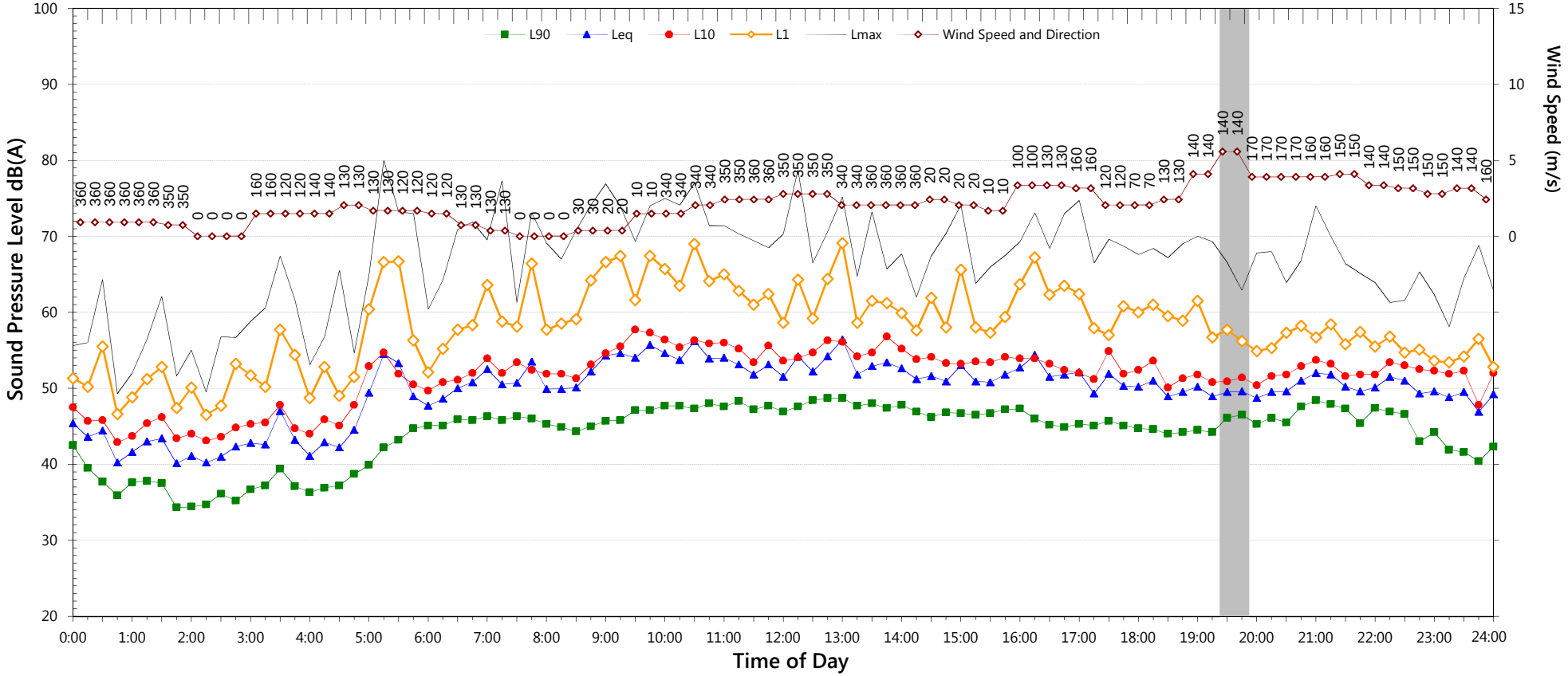
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Monday, 23 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	45.0	44.2	33.6
Leq	52.8	50.2	47.1

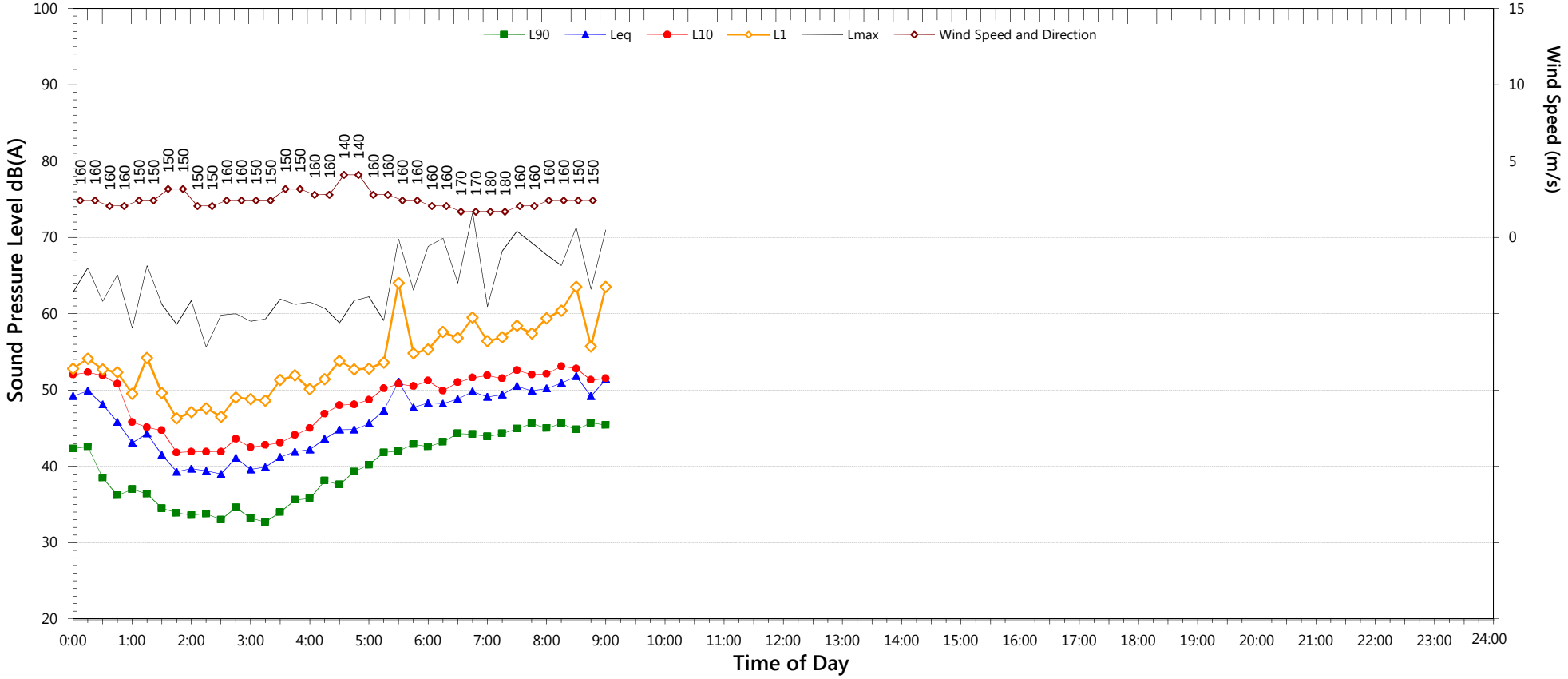
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

2 Anthony St, Blacktown

Tuesday, 24 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.3	-	-
Leq	50.5	-	-

NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.

3. Graphed data measured in free-field; tabulated results facade corrected

4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

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1/50 Charles St, Blacktown

Background & Ambient Noise Monitoring Results - NSW 'Industrial Noise Policy', 2000						
	L_{A90} Background Noise Levels[5]			L_{Aeq} Ambient Noise Levels		
Date	**Day**	**Evening**	**Night**	**Day**	**Evening**	**Night**
Tuesday-17-December-2013	41.3	44.6	35.8	51.0	51.6	48.5
Wednesday-18-December-2013	39.2	41.5	41.4	50.3	48.9	47.3
Thursday-19-December-2013	40.4	45.1	41.4	48.1	50.7	48.6
Friday-20-December-2013	44.4	49.7	37.5	65.5	61.0	48.4
Saturday-21-December-2013	40.2	40.7	39.8	50.7	50.6	46.5
Sunday-22-December-2013	44.4	49.8	41.6	60.1	53.8	48.9
Monday-23-December-2013	45.8	40.6	33.0	54.6	50.3	47.7
Tuesday-24-December-2013	40.3	-	-	46.9	-	-
Representative Weekday	**40.9**	**44.6**	**37.5**	**58.5**	**55.3**	**48.1**
Representative Weekend	**42.3**	**45.3**	**40.7**	**57.6**	**52.5**	**47.9**
Representative Week	**40.9**	**44.6**	**39.8**	**58.3**	**54.7**	**48.1**

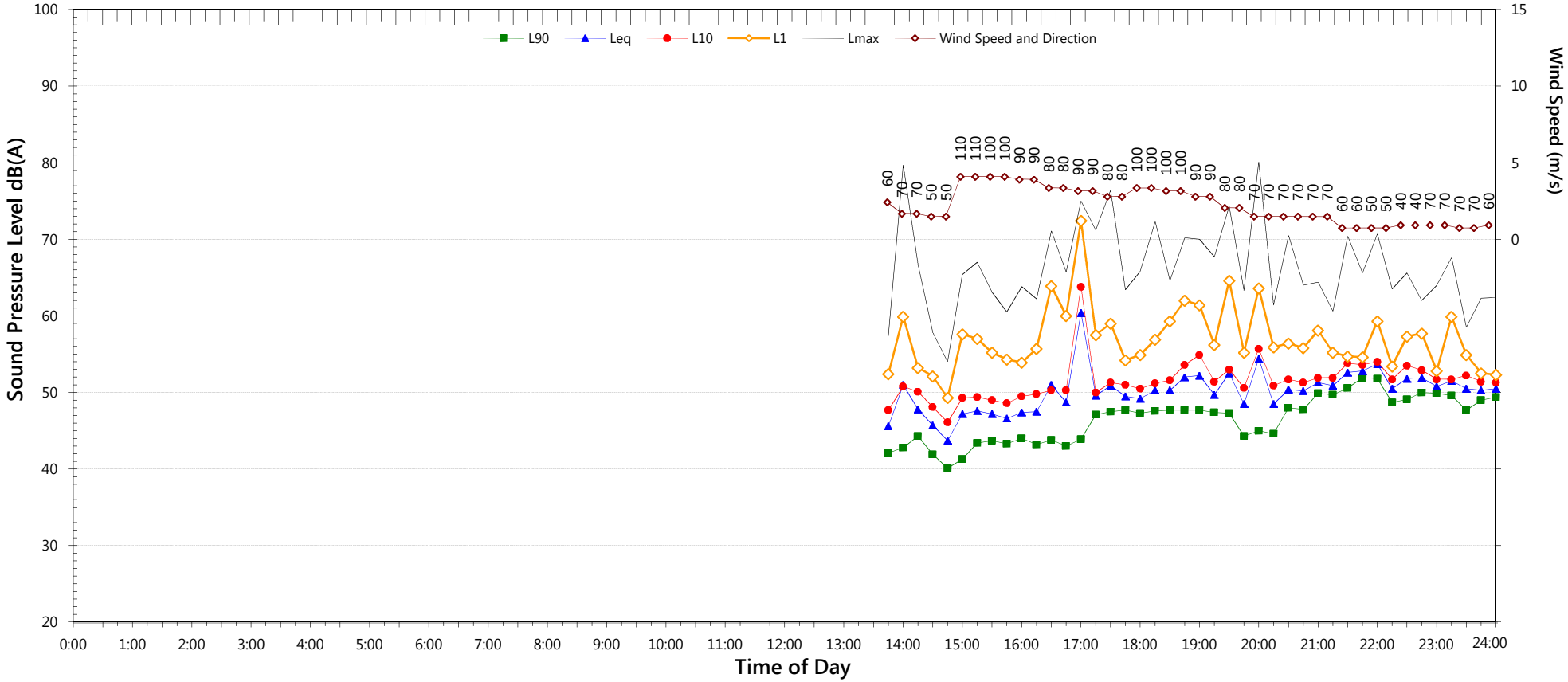
Notes:

1. Day is taken to be 7:00am to 6:00pm
2. Evening is taken to be 6:00pm to 10:00pm.
3. Night is taken to be the remaining periods.
4. Rating Background Level (RBL) for L90 and logarithmic average for Leq
5. Assessment Background Level (ABL)
6. Rating Background Level (RBL) for L90 and logarithmic average for Leq

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Tuesday, 17 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	41.3	44.6	35.8
Leq	51.0	51.6	48.5

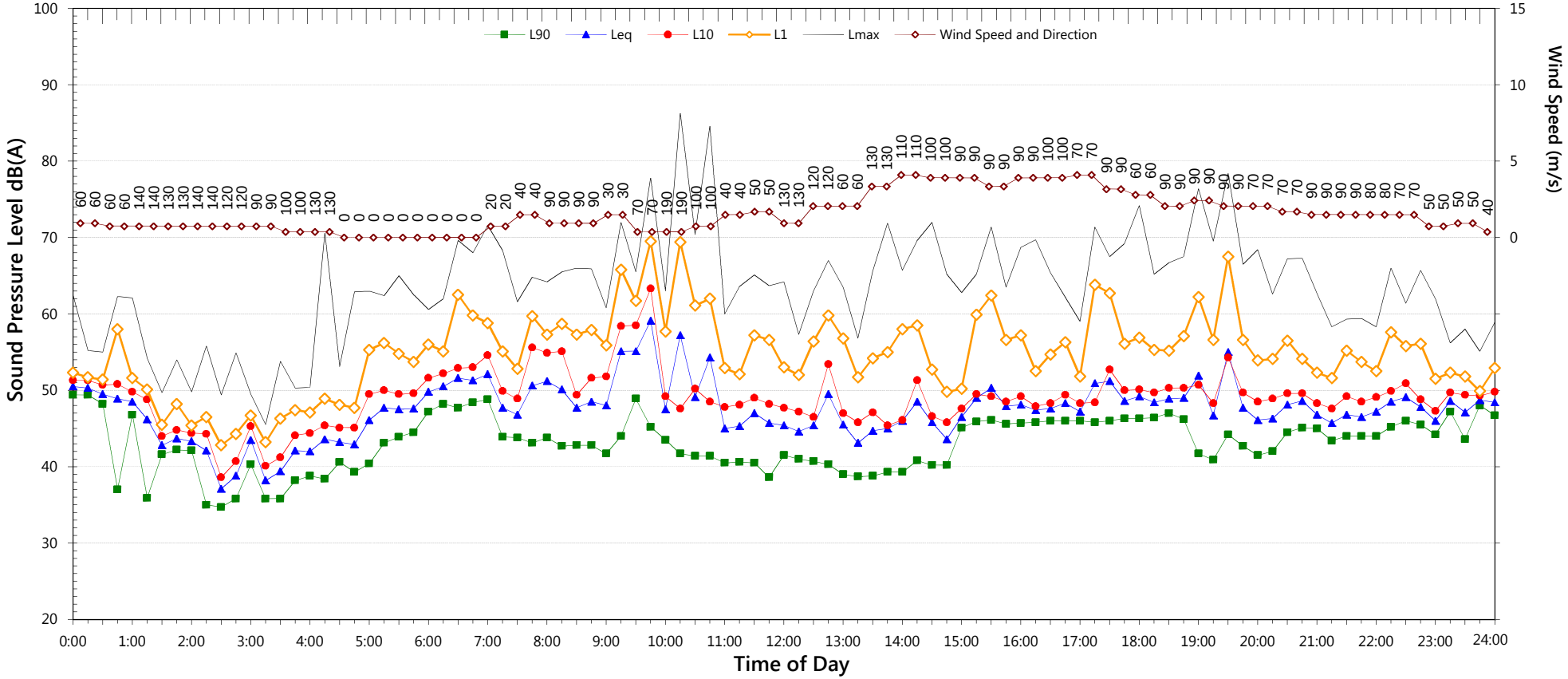
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Wednesday, 18 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	39.2	41.5	41.4
Leq	50.3	48.9	47.3

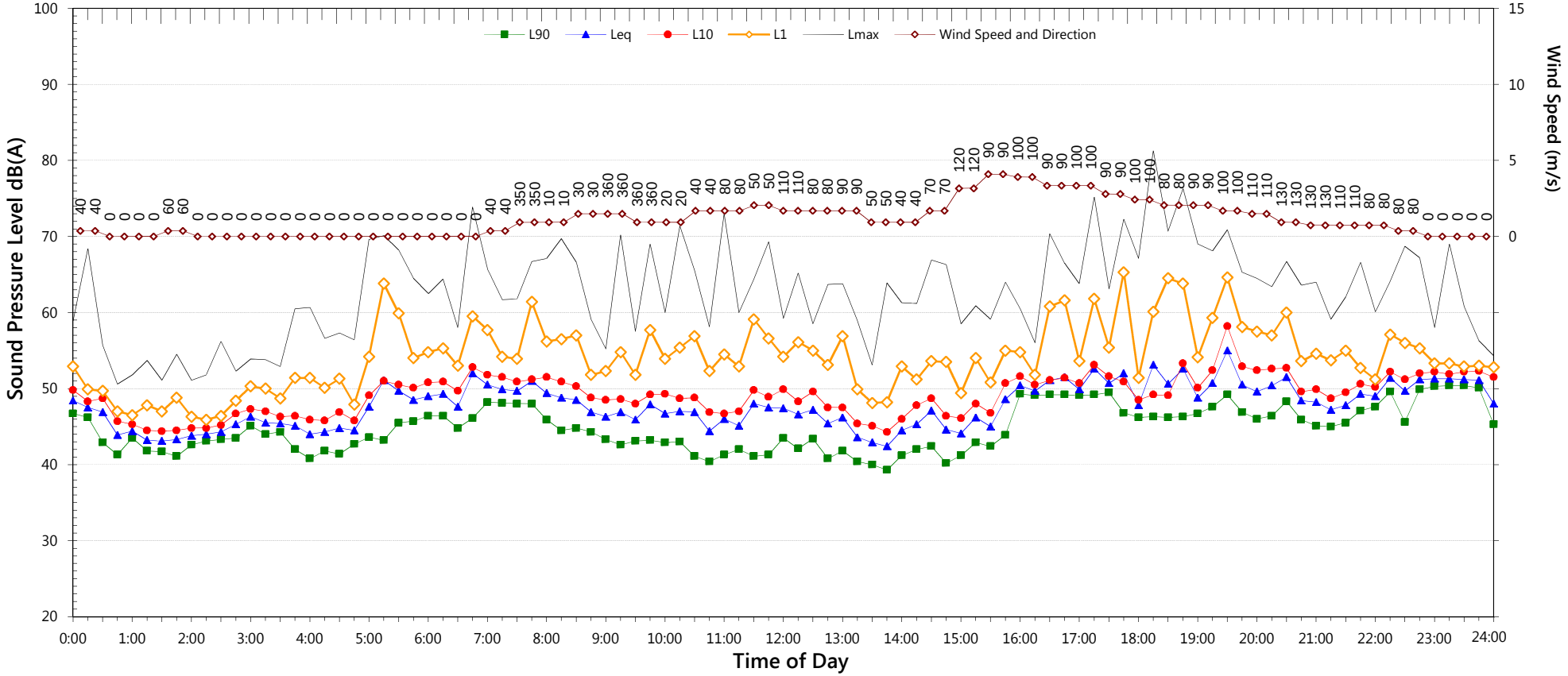
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Thursday, 19 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	40.4	45.1	41.4
Leq	48.1	50.7	48.6

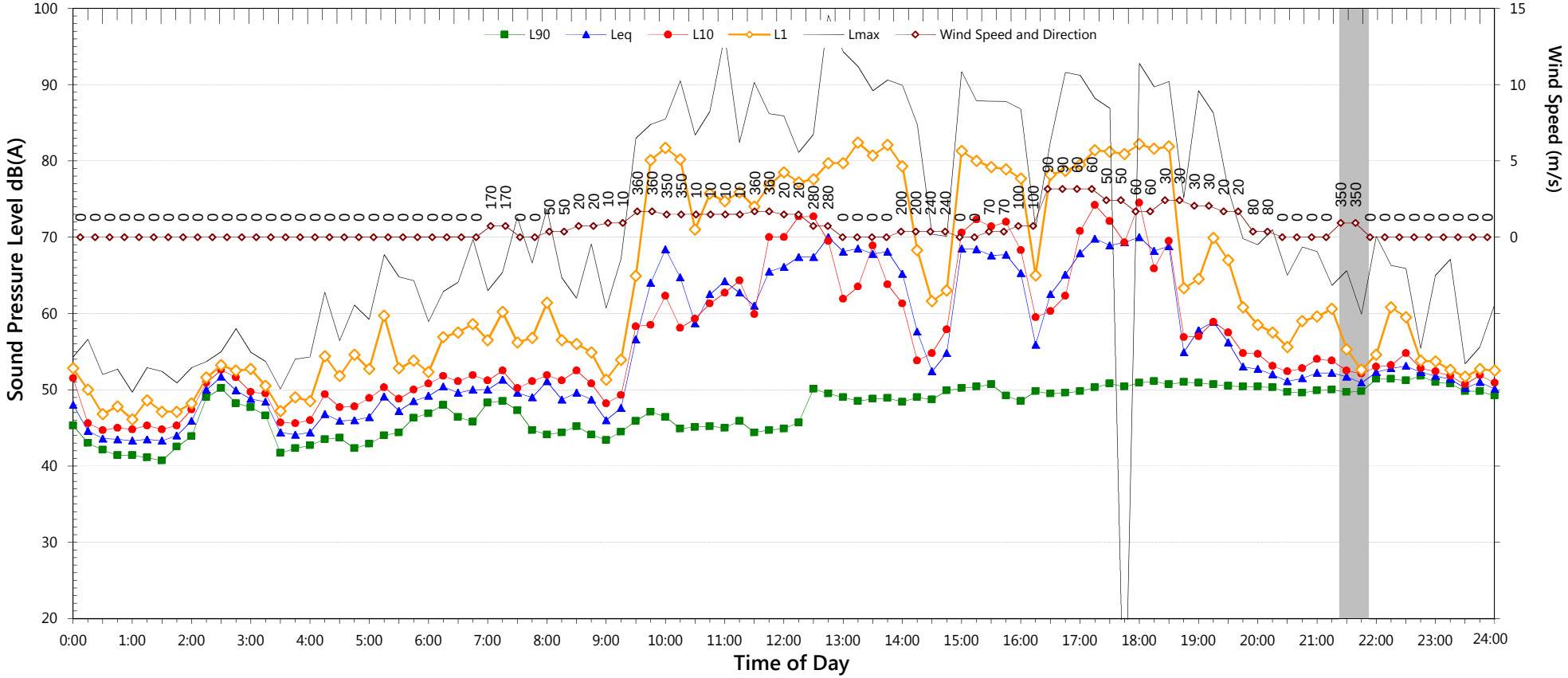
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Friday, 20 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.4	49.7	37.5
Leq	65.5	61.0	48.4

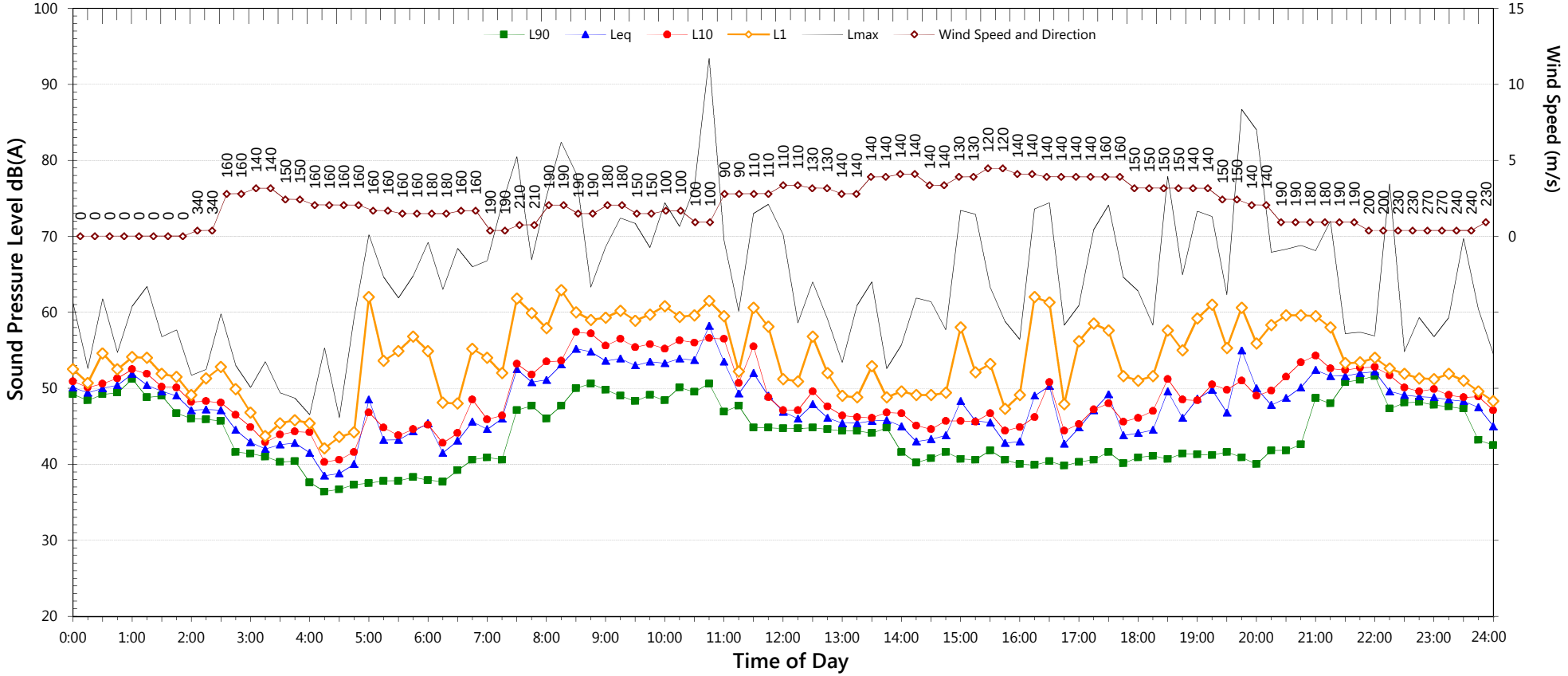
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Saturday, 21 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	40.2	40.7	39.8
Leq	50.7	50.6	46.5

NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.

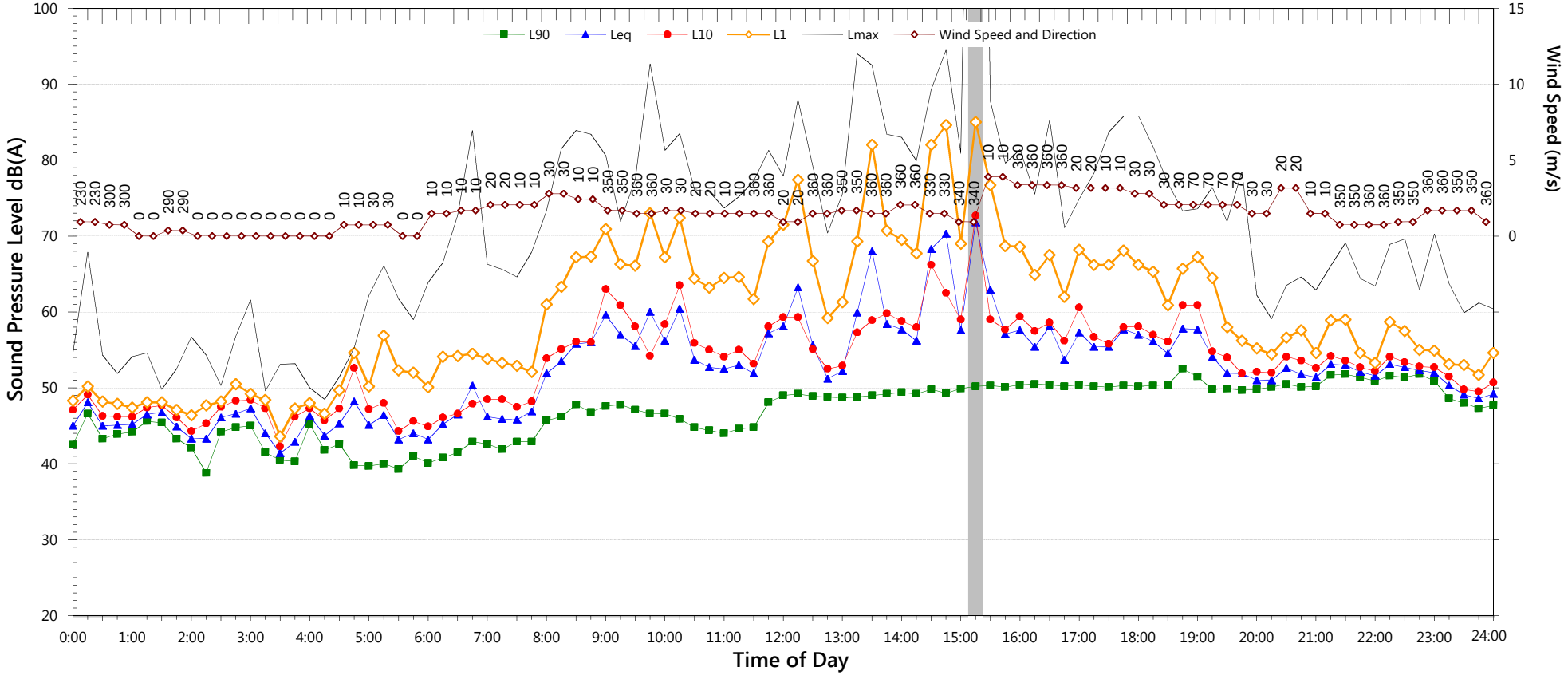
3. Graphed data measured in free-field; tabulated results facade corrected

4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Sunday, 22 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	44.4	49.8	41.6
Leq	60.1	53.8	48.9

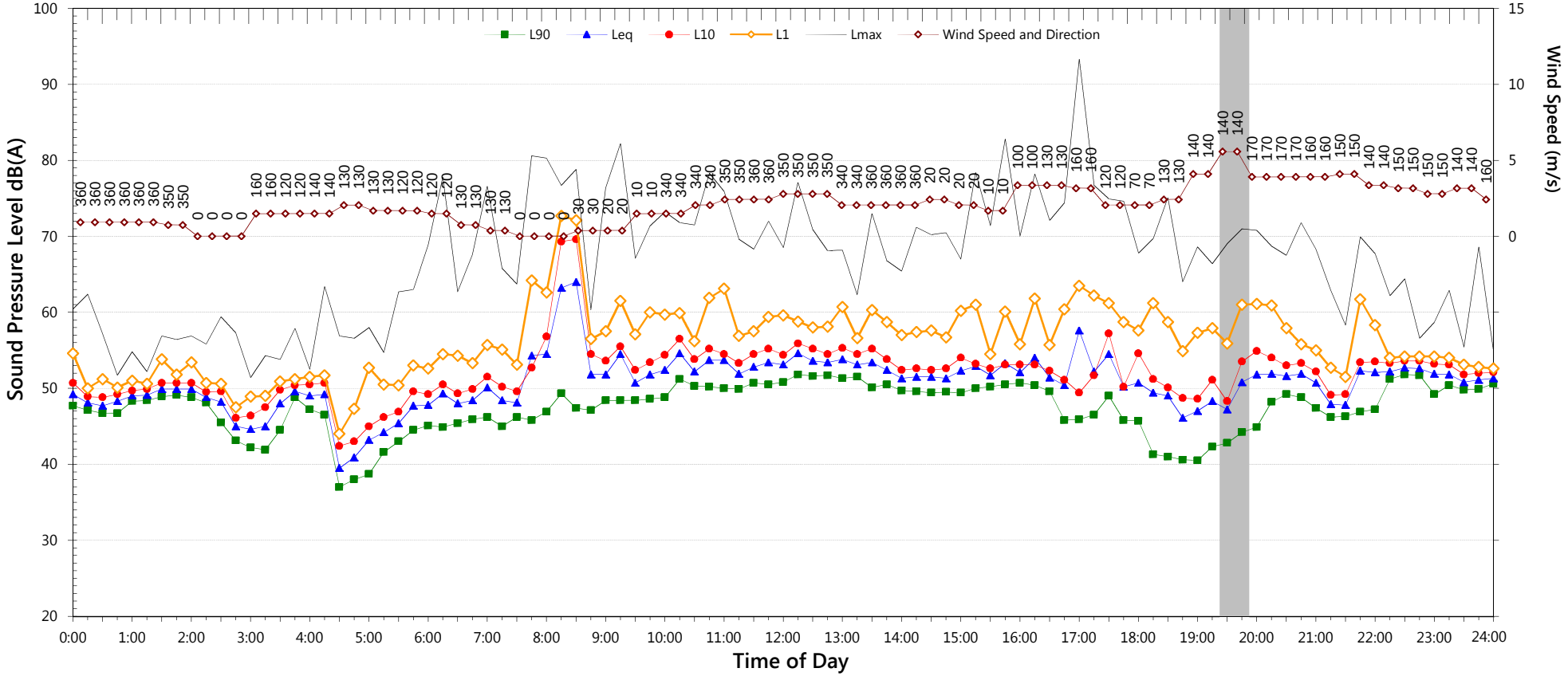
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Monday, 23 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	45.8	40.6	33.0
Leq	54.6	50.3	47.7

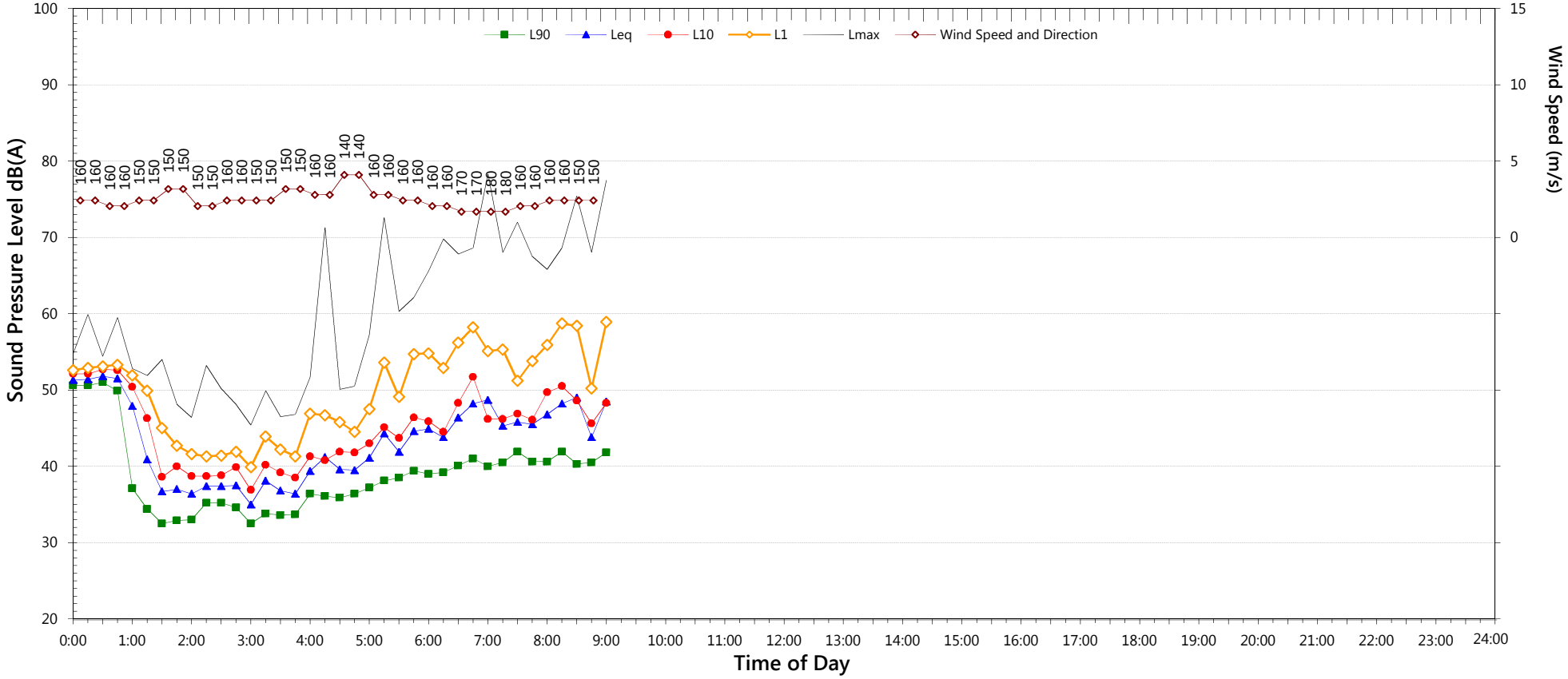
NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.
3. Graphed data measured in free-field; tabulated results facade corrected
4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

Unattended Noise Monitoring Results

1/50 Charles St, Blacktown

Tuesday, 24 December 2013



NSW Industrial Noise Policy (Free Field)			
Descriptor	Day	Evening	Night[2]
	7am-6pm	6pm-10pm	10pm-7am
L_{90}	40.3	-	-
Leq	46.9	-	-

NOTES:

1. Shaded periods denote measurements adversely affected by rain, wind or extraneous noise - data in these periods are excluded from calculations.
2. "Night" relates to period from 10pm on this graph to 7am on the following graph.

3. Graphed data measured in free-field; tabulated results facade corrected

4. Night time Lmax values are shown only where Lmax >65dB(A) and where Lmax- Leq ≥15dB(A)

25 September 2017
TG616-05F03 Fire Tanks (r2).docx

Sell & Parker Pty Ltd
Ms Catherine Maddox
catherinem@sellparker.com.au

From: William Chan [William.Chan@renzotonin.com.au]

Kings Park Waste Metal Recovery, Processing and Recycling Facility - Fire Hydrant Water Storage Tanks and Pumps Acoustic Assessment

1 Introduction

Renzo Tonin & Associates was engaged to assess the noise impacts from the proposed fire hydrant water storage tanks and pumps to be installed at the Kings Park Waste Metal Recovery, Processing and Recycling Facility. The purpose of this review is to determine the additional impacts to the predicted noise levels presented in the "EIS Supplementary Noise and Vibration Impact Assessment", prepared by Renzo Tonin & Associates with reference TG616-03F01 dated 3 September 2015 and the subsequent "Section 96 Difference to Acoustic Impacts", prepared by Renzo Tonin & Associates with reference TG616-05F02 dated 10 August 2016.

2 Proposed Fire Tanks and Pump House Motors

This assessment is based on the architectural drawing provided by the client with drawing reference: DA-1049-14-A101-L. The proposal is for the installation of 2 fire hydrant water storage tanks each holding 451,000 litres, dimensions of 7.5m and 10.61m height, and the fire pump house installed on the western side of the 23 Tattersall Road lowered car park.

The pump house located adjacent to the tanks will be constructed from reinforced concrete and contain the noise generating equipment listed in the table below:

Table 2.1 – Noise Generating Equipment

Noise Source	Noise rating
1 x Diesel motor - John Deere 6cylinder heat exchanger cooled rated at 249kW @1,600RPM	94dB(A) @ 1m
1 x Electric motor - TEFC ,415 Volt, 110kw, 182 Amp, FLC running 2 pole speed	78dB(A) @ 1m

It is noted that only one motor will operate at any one time. The electric motor and the diesel motor will be turned on for monthly testing during operating hours which will last approximately one hour.

In the event of a fire the electric motor will be utilised first and if FRNSW elect to turn the power off to the site then the electric motor will be turned off and the diesel motor engaged.

Construction of the fire hydrant water storage tanks and the fire hydrant system pump house will occur within the approved construction hours from Development Consent Condition B31 (Application SSD5041):

- Monday to Friday 7am to 6am
- Saturday 8am to 1pm
- Sunday & Public Holidays Nil

3 Noise Impacts

For the fire hydrant system pump room, it is noted that this is utilised in the case of a fire emergency at the site. Scheduled testing of the equipment may occur monthly and the noise emissions from the testing will be assessed. Testing of the equipment will use the electric motor within the pump room and is assumed to be completed within one hour per test during operating hours, The same one hour test per month will be conducted for the diesel engine. The difference to the predicted noise level emission from site operations with the testing of the fire hydrant system is shown below.

Table 3.1 – Difference to Predicted Noise Level Emission from Site Operations with Testing of Fire Hydrant System

Receiver	Change in Acoustic Impact
R1 - Residential Premises to the east - Sunnyholt Road	No change
R2 - Residential Premises to the north - Camorta Close	No change
R3 - Residential Premises to the west - Railway Road	No change
R4 - Neighbouring Industrial Premises to the north - 38 Tattersalls Road	No change
R5 - Neighbouring Industrial Premises to the west - 57-69 Tattersalls Road	No change
R6 - Neighbouring Industrial Premises to the east - 21 Tattersalls Road	No change
R7 - Neighbouring Industrial Premises to the south - 38 Forge Street	No change

It can be seen from the table above that with the proposed fire hydrant water storage pumps, the predicted noise levels to identified receivers will be the same as the noise levels presented in the previous assessments. All receivers were predicted to comply with the nominated criteria in the previous assessments and therefore all receivers are predicted to comply with the addition of the fire hydrant water storage tanks and pumps.

4 Conclusion

A review of the proposed fire hydrant water storage tanks and pumps for Kings Park Waste Metal Recovery, Processing and Recycling Facility showed that predicted noise levels at the identified receiver locations will be the same as presented in the previous reports. All identified receiver locations were found to comply with the nominated noise criteria in the previous reports, and compliance will be maintained with the installation of the proposed fire hydrant water storage tanks and pumps.

Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Authorised
14.09.2017	Generate letter		0	WC		WC
18.09.2017	Added plan 2		1	WC		WC
25.09.2017	Only revised plan		2	WC		WC

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 115dB Limit of sound permitted in industry 120dB Deafening
dB(A)	A-weighted decibels. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L_{Max}	The maximum sound pressure level measured over a given period.
L_{Min}	The minimum sound pressure level measured over a given period.
L_1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L_{10}	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L_{90}	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).

L_{eq}	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

19 December 2017
TG616-06F01 S96 Acoustic Letter (r1).docx

Sell & Parker Pty Ltd
Ms Catherine Maddox
catherinem@sellparker.com.au

From: William Chan [William.Chan@renzotonin.com.au]

Kings Park Waste Metal Recovery, Processing and Recycling Facility - Section 96 Difference to Acoustic Impacts

1 Introduction

Renzo Tonin & Associates was engaged to review the proposed Section 96 design changes to the acoustic treatment for Kings Park Waste Metal Recovery, Processing and Recycling Facility located at 45 Tattersall Road, Kings Park. The purpose of this review is to determine the difference in the predicted noise levels in previous assessments prepared by Renzo Tonin & Associates, presented in the "EIS Supplementary Noise and Vibration Impact Assessment" (TG616-03F01 dated 3 September 2015) with subsequent changes presented in the "Kings Park Waste Metal Recovery, Processing and Recycling Facility - Section 96 Difference to Acoustic Impacts" (TG616-05F02 dated 10 August 2016) and "Kings Park Waste Metal Recovery, Processing and Recycling Facility - Fire Hydrant Water Storage Tanks and Pumps Acoustic Assessment" (TG616-05F03 dated 25 September 2017).

2 Section 96 Design Changes

The following list of Section 96 design changes will potentially affect the acoustic impacts to the identified receiver locations:

- Increase the height of the acoustic fence along the western boundary from 8m to 10m height;
- Only one weighbridge along the western boundary; and
- Adding an annex to Building C.

3 Difference to Acoustic Impacts

The Section 96 design changes listed in Section 2 were updated in the CadnaA noise model used in the previous assessment. The resultant change in acoustic impacts for the identified receiver locations are shown in the table below.

Table 3.1 – Difference to Predicted Noise Level Emission from Site Operations with Section 96 Design Changes

Receiver	Change in Acoustic Impact
R1 - Residential Premises to the east - Sunnyholt Road	No change
R2 - Residential Premises to the north - Camorta Close	No change
R3 - Residential Premises to the west - Railway Road	No change
R4 - Neighbouring Industrial Premises to the north - 38 Tattersalls Road	No change
R5 - Neighbouring Industrial Premises to the west - 57-69 Tattersalls Road	Reduction by 2dB(A)
R6 - Neighbouring Industrial Premises to the east - 21 Tattersalls Road	No change
R7 - Neighbouring Industrial Premises to the south - 38 Forge Street	No change

It can be seen from the table above that with the Section 96 design changes, the predicted noise levels to identified receivers will be the same or lower than the noise levels presented in the previous assessment. All receivers were predicted to comply with the nominated criteria in the previous assessment and therefore all receivers are predicted to comply with the Section 96 design changes.

4 Conclusion

A review of the proposed Section 96 design changes to the acoustic treatment for Kings Park Waste Metal Recovery, Processing and Recycling Facility showed that predicted noise levels at the identified receiver locations will be the same or lower than presented in the previous reports. All identified receiver locations were found to comply with the nominated noise criteria in the previous reports, and with the Section 96 design changes all identified receiver locations will comply with the nominated noise criteria.

Document control

Date	Revision history	Non-issued revision	Issued revision	Prepared	Instructed	Authorised
4.12.2017	Generate letter		0	WC		WC
19.12.2017	Revision		1	WC		WC

APPENDIX A Glossary of terminology

The following is a brief description of the technical terms used to describe noise to assist in understanding the technical issues presented.

Adverse weather	Weather effects that enhance noise (that is, wind and temperature inversions) that occur at a site for a significant period of time (that is, wind occurring more than 30% of the time in any assessment period in any season and/or temperature inversions occurring more than 30% of the nights in winter).
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment period	The period in a day over which assessments are made.
Assessment point	A point at which noise measurements are taken or estimated. A point at which noise measurements are taken or estimated.
Background noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level (see below).
Decibel [dB]	The units that sound is measured in. The following are examples of the decibel readings of every day sounds: 0dB The faintest sound we can hear 30dB A quiet library or in a quiet location in the country 45dB Typical office space. Ambience in the city at night 60dB CBD mall at lunch time 70dB The sound of a car passing on the street 80dB Loud music played at home 90dB The sound of a truck passing on the street 100dB The sound of a rock band 110dB Operating a chainsaw or jackhammer 120dB Deafening
dB(A)	A-weighted decibels. The A- weighting noise filter simulates the response of the human ear at relatively low levels, where the ear is not as effective in hearing low frequency sounds as it is in hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise is measured using the A filter.
dB(C)	C-weighted decibels. The C-weighting noise filter simulates the response of the human ear at relatively high levels, where the human ear is nearly equally effective at hearing from mid-low frequency (63Hz) to mid-high frequency (4kHz), but is less effective outside these frequencies.
Frequency	Frequency is synonymous to pitch. Sounds have a pitch which is peculiar to the nature of the sound generator. For example, the sound of a tiny bell has a high pitch and the sound of a bass drum has a low pitch. Frequency or pitch can be measured on a scale in units of Hertz or Hz.
Impulsive noise	Having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise.
Intermittent noise	The level suddenly drops to that of the background noise several times during the period of observation. The time during which the noise remains at levels different from that of the ambient is one second or more.
L_{Max}	The maximum sound pressure level measured over a given period.
L_{Min}	The minimum sound pressure level measured over a given period.
L_1	The sound pressure level that is exceeded for 1% of the time for which the given sound is measured.
L_{10}	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L_{90}	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A).

L_{eq}	The "equivalent noise level" is the summation of noise events and integrated over a selected period of time.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound absorption	The ability of a material to absorb sound energy through its conversion into thermal energy.
Sound level meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound pressure level	The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound power level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Tonal noise	Containing a prominent frequency and characterised by a definite pitch.

APPENDIX I DPIE PLAN APPROVAL

Planning, Industry & Environment

Contact Name: Bruce Zhang
Number: 02 9274 6137
Email: Bruce.Zhang@planning.nsw.gov.au

Mr Sean Fishwick
Senior Environmental Consultant
Arcadis
Level 16, 580 George Street
SYDNEY NSW 2000

Dear Mr Fishwick

Kings Park Metal Recycling Facility (SSD 5041)
Approval of Environmental Management Plans

I refer to your email dated 23 August 2019, seeking approval for the following management plans:

- Waste Monitoring Management Plan (WMMP) (Condition B1, Part B, Schedule 2)
- Water Management Plan (WMP) (Condition B4, Part B, Schedule 2)
- Air Quality Management Plan (AQMP) (Condition B17, Part B, Schedule 2)
- Noise Management Plan (NMP) (Condition B29, Part B, Schedule 2)
- Emergency Response Plan (ERP) (Condition B36, Part B, Schedule 2)
- Landscape Management Plan (LMP) (Condition B39, Part B, Schedule 2)
- Operational Environmental Management Strategy (OEMS) (Condition C3, Part C, Schedule 2).

The Department has reviewed the revised management plans and concludes they are consistent with the relevant conditions. As such, the following plans are approved:

- Waste Monitoring Management Plan, prepared by Arcadis, dated 12 September 2019, Revision F
- Water Management Plan, prepared by Arcadis, dated 12 September 2019, Revision H
- Air Quality Management Plan, prepared by Arcadis, dated 11 September 2019, Revision E
- Noise Management Plan, prepared by Arcadis, dated 12 September 2019, Revision E
- Emergency Response Plan, prepared by Arcadis, dated 11 September 2019, Revision F
- Landscape Management Plan, prepared by Arcadis, dated 11 September 2019, Revision E
- Operational Environmental Management Plan, prepared by Arcadis, dated 12 September 2019, Revision E.

Should you have any queries in relation to this matter, please contact Bruce Zhang, Acting Senior Environmental Assessment Officer on the above contact details.

Yours sincerely

C. Ritchie 8/10/19

Chris Ritchie
Director
Industry Assessments
as delegate of the Planning Secretary

ARCADIS Design & Consultancy for natural and built assets