Memorandum

To: Peter Rand

From: Wayne Johnson

Date: 17 November 2021

TTPP REF: 19237

CC: Santi Botross, Kenta Lam

RE: 23-43 & 45 TATTERSALL ROAD, KINGS PARK
RESPONSE TO SUBMISSIONS

As requested, please find herein The Transport Planning Partnership's (TTPP) response to submissions from the Department of Planning, Industry and Environment (DPIE) relating to traffic matters in relation to the State Significant Development (SSD-10396).

The SSD Application seeks approval for an increase in operational capacity of the existing resource recovery facility (RRF) located at 23-43 and 45 Tattersall Road, Kings Park.

DPIE's submissions are presented herein with responses to the submissions provided thereafter.

Submissions by Transport for NSW

Traffic Item1 (DPIE Item 6)

> **Traffic**
>
> 6. It would appear that Figure 6-1 in the Traffic Assessment (Appendix E of the EIS) shows heavy vehicles queuing/stacking in areas shown as stockpiles in the SP (Appendix G of the RTS). Please provide an amended Figure 6-1 that includes the proposed stockpile layouts and demonstrates there is sufficient room onsite for vehicle queueing.

Response:

The stockpile plan and vehicle stacking plan have been updated, ensuring that vehicles can manoeuvre through the site or be waiting in a stacking area without impeding stockpile access and site operations. The revised onsite staking plan has been provided in Attachment One.

Item 2 (DPIE Item 7)

7. To demonstrate the stacking analysis represents the peak operational hour, please provide a breakdown of traffic volumes by hour.

Response:

As described in the previous *Response to Submissions*, dated 26 November 2020, incoming waste material will be sent to any of the following processing areas within the site depending on the type of metal:

- Non-Ferrous
- Pre-shredder
- Shredder
- Lindermann Shear
- Heavy/ Danielli Shear
- Oxy Cutters.

Outgoing processed material, referred to as 'Floc and Shred', will be transported off-site via truck and dog.

As assessed in the *23-43 & 45 Tattersall Road, Kings Park Traffic Impact Assessment* (TIA), dated 5 August 2020, future material processing operation is estimated to generate approximately 423 heavy vehicles and 89 light vehicles per day. In comparison to the existing site operation, the future site operation would generate an additional 176 heavy vehicles and 38 light vehicles per day.

Figure 1 shows the future site daily traffic generation based on:

- the type of material to be delivered/ collected at the site, and
- whether it is transported by light vehicle or heavy vehicle.

Figure 1: Future Site Operation Daily Traffic Generation

	Processing Type	No. of Vehicles		
		Light Vehicles	Heavy Vehicles	Total
Daily	Non-Ferrous	80	23	103
	Pre-Shredder	0	24	24
	Shredder	9	261	270
	Lindemann Shear	0	0	0
	Heavy / Danielli Shear (Heavy)	0	19	19
	Oxy Cutters	0	4	4
	Floc and Shred	0	92	92

Reproduced from 23-43 & 45 Tattersall Road, Kings Park Traffic Impact Assessment, dated 5 August 2020, prepared by The Transport Planning Partnership

Generally, the future arrival of vehicles on an hourly basis is expected to be similar to existing patterns. Therefore, having consideration for operations of the future facility as well as trip generation patterns based on historic weighbridge data, the future site vehicle generation is estimated as presented below.

In Table 1, the future operational peak hour is expected to occur at 10am whereby there would be approximately 33 heavy vehicles and 10 light vehicles entering the site.

Table 1: Future Site Traffic Generation

Starting Hour	No. of Vehicles Accessing Various Processing Areas On-Site									Total HV	Total LV
	Non-ferrous		Pre-Shredder (HV)	Shredder		Lindeman Shear (HV)	Danielli Shear (HV)	Oxy Cutters (HV)	Floc & Shred (HV)		
	(HV)	(LV)		(HV)	(LV)						
6am	2	4	2	18	0	0	1	1	6	**30**	**4**
7am	2	4	2	19	1	0	2	0	7	**32**	**5**
8am	2	4	2	19	1	0	1	1	7	**32**	**5**
9am	2	8	2	19	1	0	1	0	6	**30**	**9**
10am	2	9	2	20	1	0	1	1	7	**33**	**10**
11am	2	8	2	20	1	0	1	0	7	**32**	**9**
12pm	2	7	2	19	1	0	1	0	7	**31**	**8**
1pm	2	8	2	19	1	0	1	0	7	**31**	**9**
2pm	2	9	2	20	0	0	2	0	7	**33**	**9**
3pm	2	8	2	18	1	0	1	0	7	**30**	**9**
4pm	1	4	1	12	1	0	2	0	4	**20**	**5**
5pm	1	2	2	17	0	0	1	0	6	**27**	**2**
6pm	1	2	1	15	0	0	1	0	5	**23**	**2**
7pm	0	2	0	14	0	0	2	1	5	**22**	**2**
8pm	0	1	0	12	0	0	1	0	4	**17**	**1**
Daily Total	**23**	**80**	**24**	**261**	**9**	**0**	**19**	**4**	**92**	**423**	**89**

As presented in the TIA, on-site vehicle stacking capacity has been assessed across the various processing areas on-site for each type of material. Previously, the number of available stacking spaces as assessed in the TIA were as per Figure 2 and Table 2. However, the vehicle stacking plan has since been amended for enhanced manoeuvrability and stacking through the future site. The amended stacking plan and on-site stacking analysis are presented in Figure 3 and Table 3.

The analysis of the amended vehicle stacking capacity at the future annual processing throughput of 600,000 tpa is provided in Table 4. It assesses the stacking capacity at each material processing location on-site.

Figure 2: Previous On-site Stacking Plan

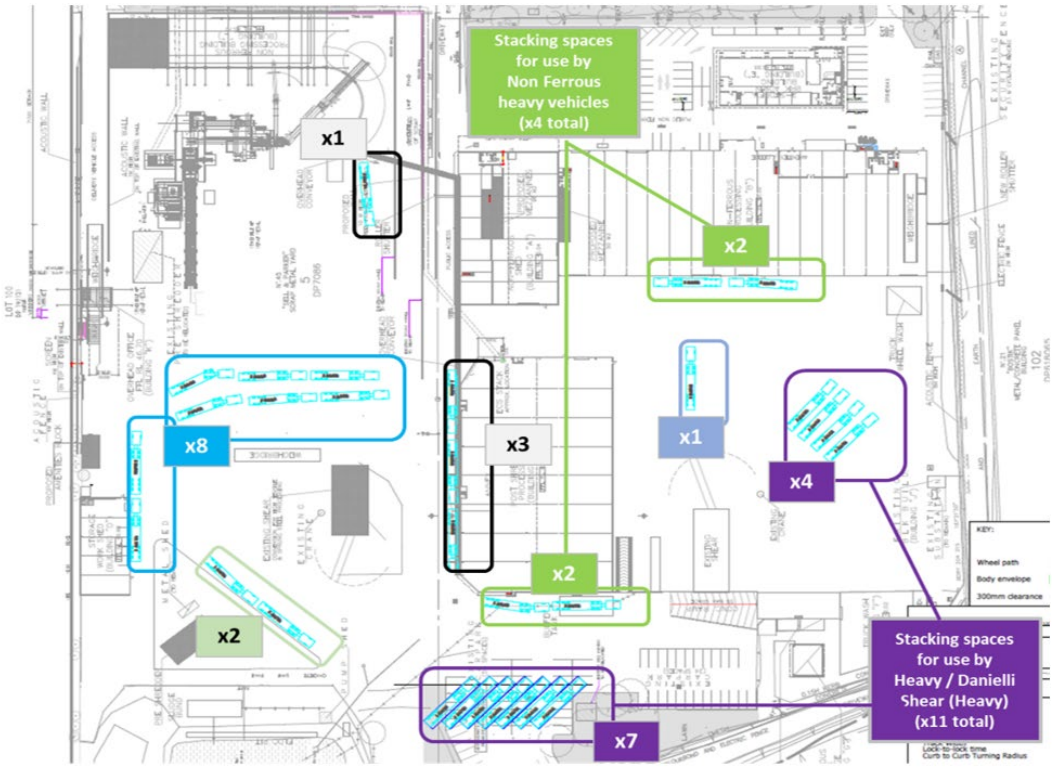

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Table 2: Previous On-site Stacking Capacity

Processing Type	Available Stacking Spaces
Non-Ferrous (External)	4
Non-Ferrous (Internal)	>5
Pre-Shredder	2
Shredder	8
Lindemann Shear	Not applicable [a]
Heavy / Danielli Shear (Heavy)	11
Oxy Cutters	1
Floc and Shred	4

Notes:
(a) The Lindemann Shear does not require nominated stacking space as the facility is infrequently accessed by trucks (i.e. existing 3 trucks per month, as shown in Table 3.1) and will continue to be accessed infrequently (i.e. future 5 trucks per month as shown in Table 5.2).

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Figure 3: Amended On-site Stacking Plan

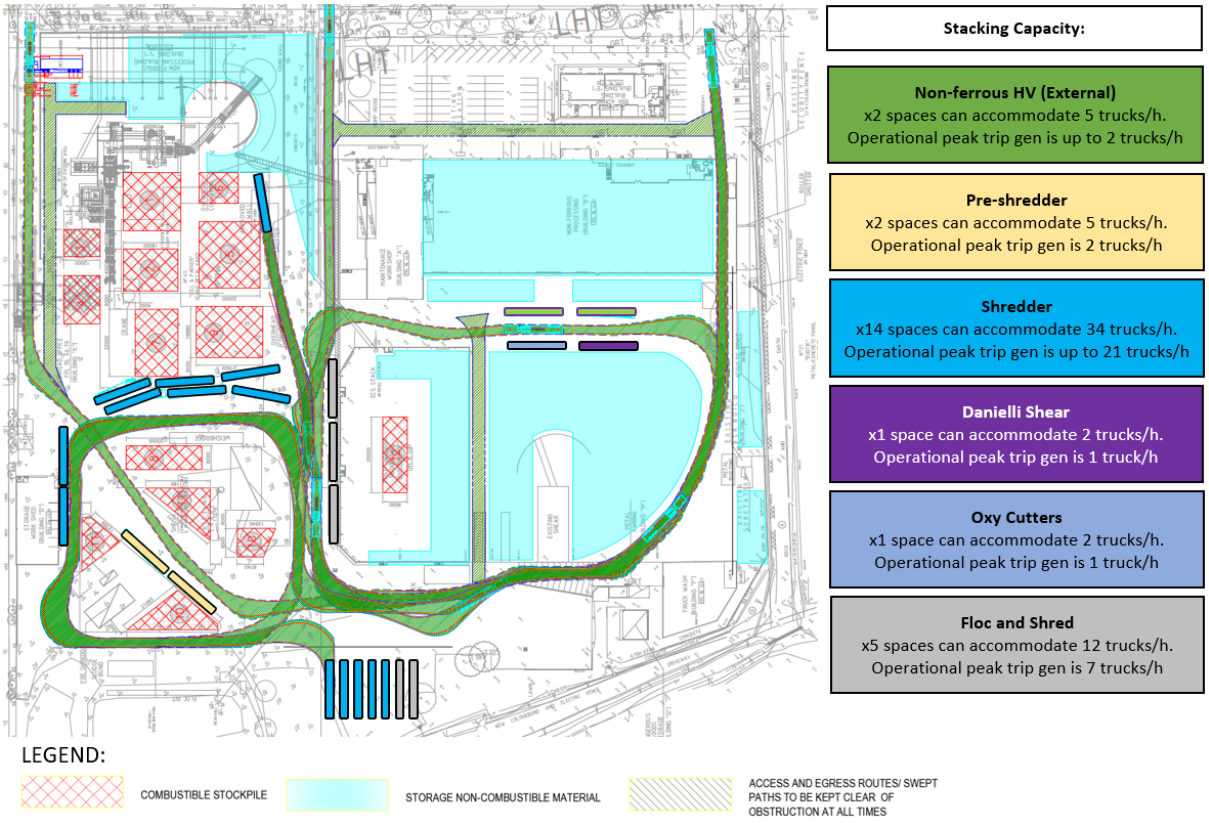


Table 3: Amended On-site Stacking Capacity

Processing Type	Available Stacking Spaces
Non Ferrous HV (External)	2
Non Ferrous LV (Internal)	>5
Pre Shredder	2
Shredder	14
Lindemann Shear	Not Applicable
Danielli Shear	1
Oxy Cutters	1
Floc and Shred	5

Notes:
(a) The Lindemann Shear does not require nominated stacking space as the facility is infrequently accessed by trucks (i.e. existing 3 trucks per month) and will continue to be accessed infrequently (i.e. future 5 trucks per month). Refer to 23-43 & 45 Tattersall Road, Kings Park Traffic Impact Assessment for the full details).

Table 4: Amended Future Stacking Capacity Analysis

Processing Type	Operational Peak Hour Vehicle Generation (Table 1)	Amended Stacking Plan		
		Number of spaces	Stacking Threshold (No. of Vehicles)	Vehicle Accommodation per Hourly Basis
Non-ferrous HV	2	2	5	2 < 4, Satisfactory
Non-ferrous LV	9	>5	>12	9 < 12, Satisfactory
Pre-Shredder	2	2	5	2 < 5, Satisfactory
Shredder (HV + LV)	21	14	34	21 < 33, Satisfactory
Lindeman Shear (HV)	0	N/A	N/A	N/A
Danielli Shear (HV)	1	1	2	1 < 2, Satisfactory
Oxy Cutters (HV)	1	1	2	1 < 2, Satisfactory
Floc and Shred (HV)	7	5	12	5 < 12, Satisfactory

As shown in the last column in Table 4, the number of vehicles expected to be generated in the future operational peak hour would be less than the stacking threshold at each material processing location. Hence, site-generated traffic in the future operational peak hour would be satisfactorily accommodated within the Proposal site.

Item 3 (DPIE Item 8)

8. Please describe measures that would be put in place to ensure no trucks are stacked or parked outside the site prior to operation commencing each day.

As advised by Sell and Parker, occurrences of early arrival resulting in trucks parking on-street outside of the site are anecdotal. The impact of any such vehicles is not material given that there is a small number of vehicles which may be parked legally on-street early in the morning.

Nonetheless, Sell and Parker has up-to-date records of its customer-base and maintains records of the arrival times of each waste material delivery to the site (through weighbridge data collection). To minimise the probability of trucks potentially stacking in front of the site prior to opening, Sell and Parker will monitor the arrival times of its customers and where records show that customers are waiting at the site gate prior 6am, the site operator will contact the customer to advise them that they are not to arrive prior to opening time.

Attachment One

LEGEND

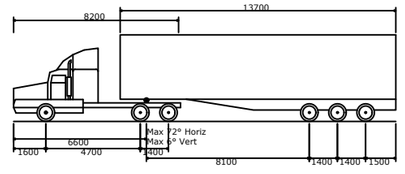
- COMBUSTIBLE STOCKPILE
- STORAGE NON-COMBUSTIBLE MATERIAL
- ACCESS AND EGRESS ROUTES/ SWEPT PATHS

NOTES

1. MIN. 6m ACCESS AROUND STOCK PILES.
2. NOT ALL STOCK PILES WILL BE FULLY OPERATIONAL OR UTILIZED AT THE SAME TIME.
3. DIMENSIONS INDICATED ARE APPROXIMATE ONLY.
4. STOCK PILES TO BE FURTHER ASSESSED TO CURRENT FRNSW FIRE SAFETY GUIDELINES FOR WASTE FACILITIES VERSION 02.02 DATED 27 FEBRUARY 2020. STOCKPILE VOLUMES AND SEPARATION DISTANCES SHOWN ARE AS PER PREVIOUSLY APPROVED METHODOLOGY FROM FRNSW.

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



AV - Articulated Vehicle

Overall Length	19000mm
Overall Width	2500mm
Overall Body Height	4301mm
Min Body Ground Clearance	418mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	SB	WJ	17/11/21

ttpp transport planning

PROJECT

METAL RECOVERY FACILITY, KINGS PARK

TITLE

SWEPT PATH ANALYSIS
19m ARTICULATED VEHICLE

DWG No. 19237CAD014
FIGURE 1

DATE STAMP 17 NOVEMBER 2021

PROJECT No.	SCALE	REV.
19237	1:1000 @A3	A

Filename: 19237CAD014-SWEPT PATH-211117.dwg Date: 17 November 2021 By: Admin