Mr Kelly McNicol
Team Leader, Industry Assessments
Department of Environment and Planning
320 Pitt Street, Sydney, NSW 2000

Arcadis Australia Pacific Pty Ltd
Level 16, 580 George Street
Sydney NSW 2000
Tel No: +61 2 8907 9000
www.arcadis.com/au

16/03/2018

Response to submissions – Minto Resource Recovery Facility (SSD 7462)

Dear Mr McNicol

This letter responds to the items raised in the *Bingo Resource Recovery Facility, 13 Pembury Road, Minto (SSD 7462) Request for Response to Submissions*, issued on 22 August 2017 and 14 February 2018.

In accordance with Section 85A of the *Environmental Planning and Assessment Regulation 2000*, Arcadis Australia (on behalf of the Applicant – Bingo Recycling Pty Ltd) have prepared a Response to Submissions (RtS) Report to address submissions made by Government agencies, organisations and members of the community. Additional information has also been provided to address the Department's comments (provided as attachment 1 of the Department's letter) which has been attached to this letter in Attachment A. Landowners consent, as requested by the Department, has been provided in Attachment B.

Environmental Protection Authority Submission and Consultation

A formal submission comprising a letter (dated 24 July 2017) was received from the Environment Protection Authority (EPA). The formal letter received outlined that the EPA were unable to undertake a detailed assessment of the Proposal on the basis the EIS had not identified how the Proposal would address the draft minimum standards for managing construction and demolition waste in NSW.

Subsequent to the exhibition period the Applicant met with the EPA to discuss the Proposal, the EIS and amendments to the Proposal proposed by the Applicant to address the draft minimum standards for managing construction and demolition waste in NSW. Following consultation between the Applicant and EPA, the EPA provided a letter (dated 30 August 2017) summarising their comments regarding the Proposal. The comments provided by the EPA within the formal submissions letter and the subsequent letter (although received outside of the exhibition period) are summarised and responded in Section 4.1 of the RtS. Following review of the RtS the EPA provided additional responses requesting further clarification on several issues. These additional responses have been integrated into those previously received and have been addressed in Section 4.1 of the RtS.

Amendments to the Proposal

A number of amendments to the Proposal (as presented in the EIS) have been proposed in response to submissions received, as a result of design progression and to further minimise impacts to the environment. An assessment of the impacts associated with

amendments to the Proposal has been provided in Section 7 of the RtS. The assessment identifies that amendments to the Proposal would result in no worsening of the impacts identified in the EIS and in many cases would result in substantial improvements.

Key amendments to the Proposal include:

- Construction of a shed and roof structure to enclose the waste processing and handling area
- Minor removal of internal shed walls and cladding
- Adjustments to the location of the proposed site office and amenities buildings and the provision of additional on-site parking spaces
- Alterations to landscaping
- Extension of a dust suppression and sprinkler system
- Minor changes and additions to internal infrastructure and operational layout
- Removal of the existing above-ground wheel wash and installation of a new 20 m long weighbridge and in-ground wheel wash at the vehicle egress point
- Relocation of the 30,000 L self-bunded fuel tank closer to the rear of Shed A.

The RtS identifies that amendments to the Proposal would be in keeping with the nature of the development and would not result in a significant impact to the environment. In many cases, Proposal Amendments would result in an improvement in environmental outcomes. Key benefits of these amendments include:

- Reduction in noise impacts to the majority of sensitive receivers
- Reduction in predicted PM_{10} and $PM_{2.5}$ levels relative to the EIS results
- Improved water management
- Improved access and stacking arrangements preventing queuing within Pembury Road
- Improved dust control measures including the provision of an in-ground wheel wash and upgraded misting and sprinkler systems.

Consultation

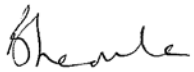
Consultation with relevant stakeholders would continue through detailed design and construction phases of the Proposal. Along with on-going communications with Government agencies, the Applicant will maintain the dedicated email address and information phone line for the Proposal, which were established during the preparation of the EIS.

Conclusion

Amendments that have been made would generally result in an improvement to environmental impacts as identified within the EIS. Given these improvements and that the Amended Proposal as presented in the RtS would not significantly change the nature of the Proposal, the Applicant does not consider re-exhibition of the Proposal to be warranted.

Further to this, consultation with affected stakeholders regarding proposal amendments and potential environmental impacts will be ongoing throughout the detailed design and construction of the Proposal.

Yours sincerely



Brad Searle
Business Leader – Environment and Waste
(02) 8907 9059

ATTACHMENT A

A submission comprising a letter (dated 22 August 2017) was received from DPE. Several comments were provided and responded to in Table 1. Additional comments were provided via email on 14 February 2018. These additional comments have been incorporated and responded to within Table 1 below.

Table 1 Response to Government Agency submission - DPE

Submission	Response / comment	Reference
Project Description		
The Department is concerned the site will be unable to process the requested amount of waste per annum due to size and other site constraints. The EIS provides an assessment of the 'do nothing' option with the site continuing to operate with no increase to capacity. Provide an assessment of additional alternatives considered, including an assessment of proposed reduced annual production rates at the facility.	An updated project description has been prepared to describe amendments made to the Proposal following the exhibition of the EIS and to provide additional clarification regarding the Amended Proposal's operations. Section 1.4.9 of the updated project description (provided in Appendix A) provides a description of the processing capacity and timing for the operation of the Amended Proposal, including activities and timing for waste disposal and collection. As noted in Section 1.4.9 the key operational processes include: • Waste disposal and collection timing and capacity • Waste processing timing and capacity • Timing and capacity for transfer of waste from the processing area to the stockpiling area • Waste storage capacity. The Amended Proposal description describes the time required to complete each of the above tasks noting that each of the activities could be undertaken simultaneously. As noted in Section 1.4.9 of Appendix A the operational hours required to complete each off the above tasks are fewer hours than the total available operational hours. Based on this analysis the facility is considered amply capable of processing the proposed throughput, and an alternative solution with a further reduced throughput is not considered necessary. Further consequences of the Minto RRF not receiving waste volumes at the future proposed throughputs would have impacts including to industry resource recovery rates (and more waste being sent to landfill), failure to reuse recoverable C&D waste, exacerbation in the shortfall of the C&D waste management capacity	Amended Proposal description (Appendix A of this RtS)

Submission	Response / comment	Reference
	across Sydney, increase in transport of waste and loss of employment. The consequences would have detrimental social, environmental and economic impacts.	
Demonstrate the proposal meets the NSW EPA Minimum Standards for Managing Construction and Demolition Waste in NSW (October 2016), particularly the comments below.	The EPA released the 'Standards for managing construction waste in NSW (draft for public consultation)' in 2017. The aim of the document is to detail a set of standards that a C&D waste facility must comply with for the purpose of meeting Part 8A of the Waste Regulation. The strategic objectives of the standards are to incentivise greater resource recovery and reduced interstate transport and to separate asbestos and other contaminants for disposal to an appropriately licenced landfill. The standards primarily consist of a number of operational requirements to be implemented at a site. Given that the Proposal is still in the pre-approval stage, updated operational documentation is yet to be finalised. The OEMP developed for the Amended Proposal will include the requirements as outlined within the standards. An overview of how the Amended Proposal would meet the draft standards has been provided below. **Standard 1** *1.1 Inspection point 1 – verified weighbridge inspection* A raised inspection platform is provided adjacent to incoming weighbridges to allow for visual inspection of waste loads. *1.2 Inspection point 2 – tip and spread inspection area* The Amended Proposal (as described in Section 6) has increased the tipping floor to allow for the provision of a demarcated visual inspection area while having minimal impact on vehicle receival rates. Visual inspection in this area would be undertaken in accordance with Standard 1.2. *1.3 Training requirements for personnel* Training requirements as outlined within Standard 1.3 will be included within the OEMP developed for the Proposal. *1.4 Rejected loads register* The OEMP prepared / updated for the Amended Proposal will contain a rejected loads register. **Standard 2: Sorting requirements** *2.1 Sorting*	N/A

Submission	Response / comment	Reference
	Waste will be sorted in accordance with Standard 2.1. **Standard 3: No mixing of waste** *3.1 No mixing of inspected and sorted construction waste with waste that has not been inspected and sorted* Processed waste would be organised within waste streams and would be stored within individual bays. Sorted waste would not be mixed with non-sorted waste, in accordance with Standard 3.1. **4 Standard 4: Waste storage requirements** *4.1 Waste storage area* *4.1.1 Waste storage* Processed waste would be organised within waste streams and would be stored within individual bays in accordance with Standard 4.1.1 and removed accordingly. *4.1.2 Waste stored in unpermitted waste storage area* All unpermitted waste types moved to a designated waste storage area in accordance with the standards and would be transported to a waste facility that can lawfully accept that waste within one business day (or any longer period as may be permitted by these standards) of receipt at the C&D waste facility. *4.2 Inspection point 3 – waste storage area* *4.2.1 Obligations of trained personnel* Training requirements as outlined within Standard 4.2.1 will be included within the OEMP developed for the Proposal. *4.2.2 Inspection records* Inspection records will be maintained in accordance with Standard 4.2.2. **Standard 5: Transport requirements** *5.1 Transport requirements* C&D waste would not be transported from the Amended Proposal site unless it has been inspected, sorted and stored in accordance with the standards and the load of waste transported from the Amended Proposal site consists of a single waste type.	
Section 4.2.8 of the EIS lists the existing and proposed plant, equipment and machinery used on	An updated list of plant and equipment for the Proposal including any changes resulting from amendments to the Proposal is included in Section 1.3.3 of Appendix A of this RtS. The equipment used onsite forms part of	Amended Proposal description

Submission	Response / comment	Reference
site. Clarify what plant, equipment and machinery is existing and what is proposed and provide the specifications of the new plant.	existing operations. Plant and Equipment may be upgraded from time to time to deliver operational efficiencies, environmental benefits and higher recycling rates.	(Appendix A of this RtS)
Confirm the hours of operation of the proposed processing plant.	A description of the Proposal including operational hours is provided in Section 4 of the EIS and an updated project description has been prepared to describe amendments made to the Proposal following the exhibition of the EIS and to provide additional clarification regarding the Amended Proposal's operations (Appendix A). Waste processing would occur throughout the proposed hours of operation, which are: • Monday to Saturday: 6:00am to 10:00pm • Sunday and Public Holidays: No processing operations Processing plant would be used across the operational hours listed above.	Section 4 of the EIS Amended Proposal description (Appendix A of this RtS)
Provide further details of the method of loading and removal of outgoing material. This is to include a description of the: a. location of trucks used for loading; and b. Frequency and method of loading.	A description of the Amended Proposal including waste handling methods is included in Appendix A of this RtS. Section 1.4.5 of Appendix A provides a description of the waste disposal and collection process. Waste collection would be centrally managed by the Customer Service and Allocations Team at the Head Office in Auburn. The role of the Allocations Team would be to determine suitable vehicles to collect the waste and designate the facility that is best suited to accept the delivery. The Allocations Team determines these details based on the information provided by the customer at the time of request. The Allocations Team is also responsible for coordinating the timing of waste collection and delivery. The site operator's fleet are tracked via GPS through the operator's mobile app. Hence, trucks can be diverted to other nearby facilities by the site operator, if required. Vehicles collecting outgoing waste would be loaded adjacent to Shed A or Shed C depending on whether they are transporting recycled products (Shed A) or residual waste (Shed C) (see Appendix I which shows vehicle swept paths and loading locations). Light residual waste that has been separated and stored in Shed C, would be transferred from the waste storage bays onto waste collection trucks (namely b-doubles) using a Liebherr Hydraulic Excavator. A front-end loader would be used on-site to transfer all other processed waste from Shed C to Shed A as needed. The same loader would be used to load material out of Shed A onto trucks for removal off site.	Amended Proposal description (Appendix A of this RtS) Addendum TIA (Appendix I of this RtS)

Submission	Response / comment	Reference
The flow diagram in Figure 8 of the EIS indicates that a conveyor will be used to transfer brick and concrete, as well as soil from Shed B to Shed A. However, section 4.2.3 of the EIS states that only soil will be transferred to Shed A using the enclosed conveyor. Revise Figure 8 and clarify how each waste stream will be transferred from Shed B to Shed A and the timing of these transfers.	As described in Section 4 of the EIS, Shed B is used for tipping and holding of tipped, unprocessed waste. Waste is transferred by an excavator from Shed B to the processing plant in Shed C. The advanced automated plant used to process waste at the Proposal site utilises a number of conveyors to pass waste through the processing system. Soil (<8mm) is separated from the remainder of the waste stream early in the process and transferred via a separate conveyor along the eastern side of Shed C to the storage bay in Shed A. All other waste streams continue through the processing system with the remainder of the waste and following further screening are deposited within a storage bay in Shed C. Process waste streams are then transferred directly from Shed C to Shed A for storage via excavator.	Section 4 of the EIS
Confirm the location of any waste bins to be stored on site (including the location of the storage of containers with non-conforming waste) and demonstrate that the site has capacity to accommodate the storage of these bins.	The layout of the Amended Proposal site including the location of storage bins is shown on the updated concept plans (Appendix B of this RtS). As shown, the expansion of Shed B allows sufficient room for tipping and inspection as well as the provision of storage bins within the tipping shed. Non-conforming and hazardous wastes would be stored along the eastern boundary and further detail on the handling and storage of non-conforming waste is provided in Appendix A of this RtS.	Amended Proposal description (Appendix A of this RtS) Amended Concept Plans (Appendix B of this RtS)
It is understood that temporary storage is required for non-conforming (unpermitted) waste items awaiting removal. In line with the EPA's draft Standards for Managing Construction and Demolition Waste in NSW	From time to time it can be expected that non-conforming items such as asbestos, batteries, fire extinguishers, tyres and gas bottles may be encountered in incoming waste. Unexpected finds of non-conforming materials would be permitted for storage only for the purposes of facilitating safe and lawful handling, storage and transport to an appropriately licensed disposal facility. Non-conforming waste (NCW) would be handled in accordance with Bingo's 'Systems and procedures for managing non-conforming waste' (Appendix F of the RtS) including:	Appendix F of the RtS

Submission	Response / comment	Reference
(October 2017) (the draft Standards), NCW should be removed from site every day. Please provide updated procedures (as appropriate) demonstrating the Applicant's commitment to adhere to the draft Standards	• SOP-YA018 Rejecting Loads of Non-Complying Waste/ Prohibited Materials • SOP-YA017 Visual Inspection of Inbound Waste • SOP-YA020 Unexpected Asbestos Finds • SOP-YA003 Asbestos at Recycling Centres • OPL-YA029 Storage of Hazardous Chemicals -Waste • OPL-YA030 Storage of Hazardous Chemicals -Special Waste The NSW Government proposes amendments to the Protection of the Environment Operations (POEO) Act and POEO (Waste) Regulation including adoption of minimum standards for managing construction and demolition waste in NSW. As at the date of this RTS these requirements have not been enacted. In the instance where the standards differ from the procedure, the standards shall apply. When the standards have been enacted these procedures will be reviewed and updated to ensure compliance with the new standards. Key procedures for managing NCW will be outlined in the RRF's Operational Environmental Management Plan (OEMP). Procedures would be developed in line with EPA Standards for Managing Construction and Demolition Waste in NSW and would include a requirement to remove non-conforming (unpermitted) waste to a waste facility that can lawfully accept that waste within one business day of receipt at the Proposal site if such a requirement was included in the enacted minimum standards.	
Provide further details regarding public deliveries of waste to the site, including the following: a. proposed contractual arrangements with third party operators; b. details of the expected waste volumes to be transported; and	Section 1.4.5 of the Amended Proposal description (Appendix A) provides a description of waste disposal and collection. Arrangements with third party operators disposing of waste, or facilities receiving waste, are subject to change due to market and regulatory influences, and are heavily dependent on current and proposed development projects. Contractual arrangements between the Applicant and third party operators are therefore regularly subject to change. Further, third party vehicles may access the site without a prior contractual arrangement in place. Provision of any contractual arrangements would therefore not provide current or all-encompassing information on public deliveries of waste to site. Predicted waste stream volumes for the Proposal have been identified in Section 4 of the EIS and Section 1.4.1 of the Amended Proposal description (Appendix A) and are summarised below:	Section 4 of the EIS Amended Proposal description (Appendix A of this RtS) Addendum TIA (Appendix I of this RtS)

Submission	Response / comment			Reference
c. details of the expected number and vehicle types.	**Material**	**Volume (TPA)**	**Percentage**	
	Wood waste	4,400	2%	
	Non Chemical Manufacturing Waste	4,400	2%	
	Asphalt Waste	2,200	1%	
	Soils and waste that meets all conditions of a resource recovery order and/or exemption	22,000	10%	
	Paper and cardboard	1,100	0.5%	
	Glass, plastic, rubber, plasterboard, metal, green waste	1,100	0.5%	
	Household waste (municipal clean up)	4,400	2%	
	Office and packaging waste	4,400	2%	
	Building and demolition waste	165,000	75%	
	VENM	11,000	5%	
	TOTAL	220,000	100%	
	These are estimates only as the waste types (and quantities of those waste types) received at the facility will vary in proportion over time.			

Submission	Response / comment	Reference
	Section 3.4 of the Addendum TIA (provided in Appendix I) provides a detailed description of the types of waste delivery and collection vehicles accessing the Proposal site. Section 4.4 of the Addendum TIA provides an indicative breakdown of the anticipated proportion by vehicles type for a peak hour operational period.	
Provide floor plans and elevation plans for all existing structures on site. Provide a proposed elevation plan from Pembury Road (southern) which shows all fencing to be located on the property boundary. Provide an A3 scaled plan of Shed C which clearly shows the proposed processing plant.	Floor plans and elevations for the Amended Proposal have been provided as Appendix B, including existing structures onsite. Existing fencing along property boundaries would be maintained and would not be altered as part of the Amended Proposal. Shed C and the contained operations fall under the existing approval for the site. Floor plans and elevations for all structures and fencing on the property boundary are attached. A description of changes from amendments to the Proposal is provided in Section 6 of this RtS.	Section 6 of this RtS Amended Concept Plan (Appendix B of this RtS)
Update 'Figure 1-2 Minto Processing and Handling Flow Chart' to show unexpected finds.	An updated processing and handling flow chart has been provided as Figure 1-2 in Appendix A of the RtS.	Appendix A of the RtS
Traffic and transport		
Provide a breakdown of the proportion of light and heavy vehicles predicted to journey to and from the site during the proposed hours of operation.	An Addendum Traffic Impact Assessment (TIA) (provided in Appendix I) has been prepared to provide additional information regarding, and further assess, the potential traffic impacts associated with the Amended Proposal. A breakdown of the light and heavy vehicles under the Amended Proposal is provided in Section 4.2 of the Addendum TIA. The breakdown shows that approximately 122 two-way movements would be generated by light vehicles and 209 two-way movements would be generated by heavy vehicles on a peak day.	Addendum TIA (Appendix I of this RtS)
Provide a detailed justification for the breakdown of types of vehicles accessing the site. What are the specific operational or waste stream changes which will result in the use of a greater number of	As noted, an Addendum TIA (provided in Appendix I) has been prepared to provide additional information regarding, and further assess, the potential traffic impacts associated with the Amended Proposal. The Addendum Assessment included undertaking up to date surveys of the existing conditions of the Proposal site. Section 3.4 of the Addendum TIA (provided in Appendix I) provides a detailed description of the types of waste delivery and collection vehicles accessing the Proposal site. Section 4.4 of the Addendum TIA provides an indicative breakdown of the anticipated proportion by vehicle type for a peak hour period.	Addendum TIA (Appendix I of the RtS)

Submission	Response / comment	Reference
heavy vehicles (which are more than 15 tonnes)?		
A detailed justification for the breakdown of types of vehicles accessing the site beyond the proportion of heavy and light vehicles has not been provided.	A detailed breakdown of the types of vehicles accessing the site is given in Table 3.3 of the Addendum TIA report (Appendix I of the RtS). Further to this, the proportion of the various vehicles is given in Table 4.2 in the same document. A variety of truck sizes are required to accommodate the wide range of client projects for which the site operator provides its waste collection services. Determination of the appropriate truck for each waste delivery and collection is based on multiple factors, including: • The volume of waste required to be transported • The density of the waste being transported • Possible physical limitations at the waste point of origin (for example, site accessibility or on-site turning movements). The proportion of each vehicle type anticipated to access the Proposal site in the future is based on the current split of vehicles accessing the existing site. The site operator projects that the increase in individual waste streams will be proportional to the future annual waste throughput. As detailed in the Addendum TIA, the annual waste throughput during operation will increase by 58% from levels that were assessed under traffic survey to support updated TIA for the Amended Proposal. Thus, a waste throughput (ie. volume of waste) and traffic movements generated by waste vehicles will increase by the same amount.	-
Details of the specific operational or waste stream changes which will result in the use of a greater number of heavy vehicles (which are more than 15 tonnes) is required.	The number of vehicles generated by future operation has increased proportionally to the increase in annual waste throughput. No further changes are proposed to the site operation which would result in the use of a greater number of trucks above 15 tonnes accessing the site.	Addendum TIA (Appendix I of the RtS)

Submission	Response / comment	Reference
In this regard, please clarify what the average load of waste will be in tonnes?	Under existing operations, the average waste load per vehicle is 6.8 tonnes (Table 2.1 in Appendix I of the RtS). The Amended Proposal would not result in changes to the average waste load per vehicle.	-

Provide justification for the predicted number of light vehicle movements throughout the day.	The amount of waste transported by light vehicles to the future facility on an hourly basis will increase proportionally to the rise in annual waste throughput. Therefore, the number of light vehicle movements associated with waste deliveries will also increase proportionally. The average number of two-way light vehicle movements generated by the existing and future operation on an hourly basis is provided in Table 1. Daily profiles of these traffic movements are shown in Figure 1. Future light vehicle flows have also been provided in Table 4.1 in Appendix I of the RtS. *Table 2 Light vehicle two-way movements (Waste Vehicles)*	-

Hour starting	Existing	Future
6:00	4	6
7:00	8	12
8:00	5	8
9:00	7	10
10:00	9	11
11:00	4	5
12:00	10	15
13:00	10	14
14:00	8	11
15:00	4	5
16:00	5	7
17:00	2	5
18:00	3	5
19:00	0	4
20:00	0	2

21:00	0	2
Total	**79**	**122**

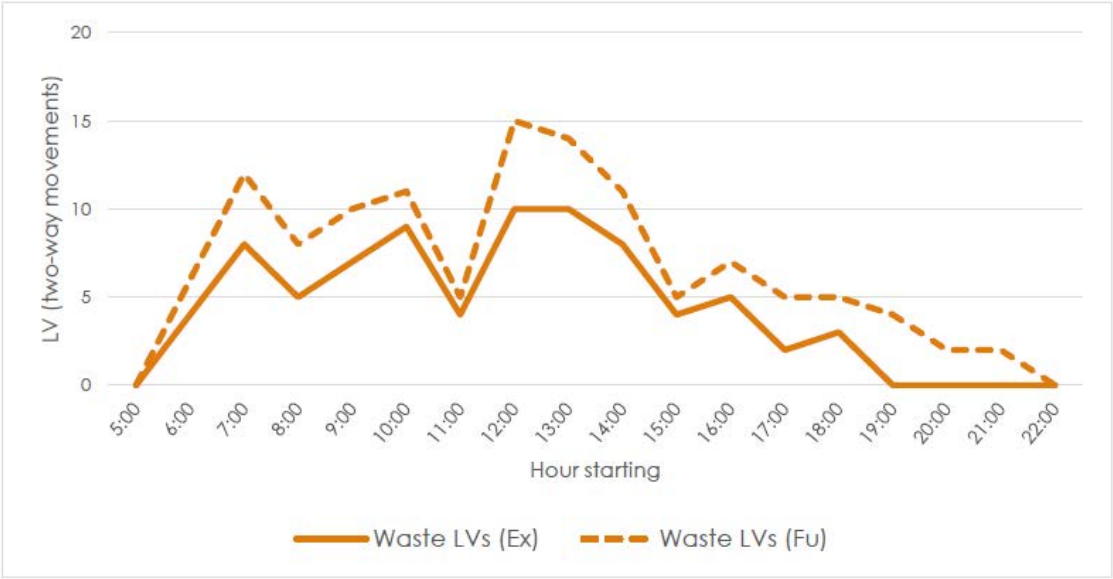


Figure 1 Daily profile of light vehicle movements (waste vehicles)

It is proposed to provide 15 parking spaces for 30 full-time employees which will be split across two shifts consisting of 13-15 staff per shift. There will be a morning shift and an afternoon shift between 6:00am-1:30pm and 2:30pm-10:00pm, respectively.

Before the start of each shift, there will be up to approximately 15 cars entering the site. Typically, staff will arrive at the site within the 30-minute period prior to the shift; that is, between 5:30am-6:00am and 2:00pm-2:30pm. Similarly, at the end of each shift staff will generally exit the site during the half hour following the shift; that is between 1:30pm-2:00pm and 10:00pm-10:30pm.

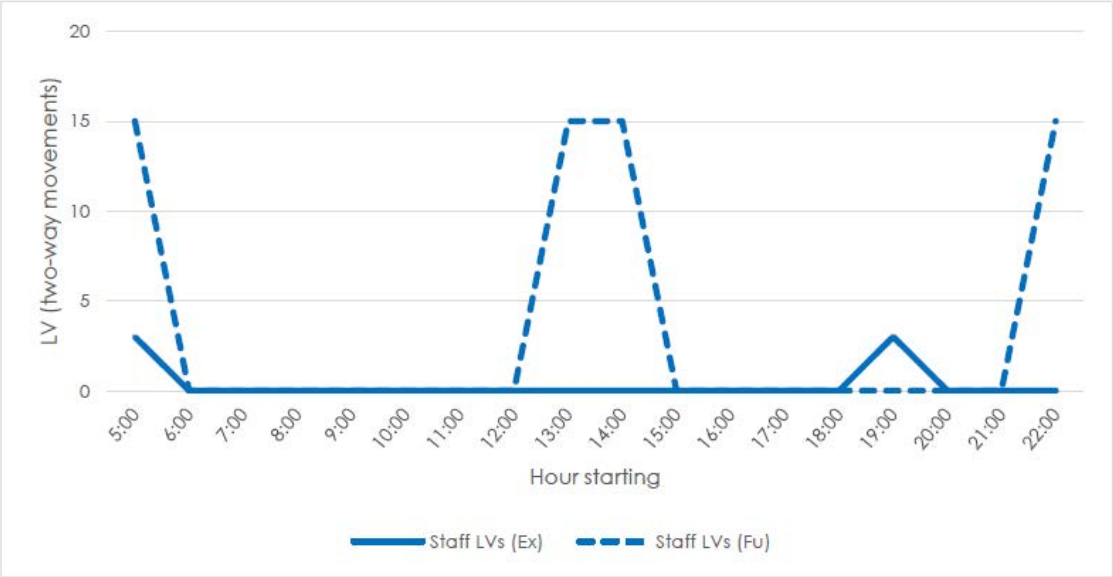
In each of the 30-minute periods of staff arrivals and departures, there will be one staff car movement every two minutes (30 minutes / 15 staff car movements). The arrival/ departure rate of staff cars will have a negligible traffic impact on the surrounding road network.

Furthermore, the site's ingress and egress driveways will be physically separated. Therefore, the impact caused by staff arrivals and departures during the staff change-over period will be dispersed and minimal.

A summary of staff vehicle movements (two-way flows) is provided in Table 2 while a daily profile is illustrated in Figure 2.

Table 3 Light vehicle two-way movements (staff vehicles)

Hour starting	Existing	Future
5:00	3 movements (inbound)	Up to 15 movements (inbound)
13:00	-	Up to 15 movements (outbound)
14:00	-	Up to 15 movements (inbound)
19:00	3 movements (inbound)	-
22:00	Site closed	Up to 15 movements (outbound)

Submission	Response / comment	Reference
	 *Figure 2 Daily profile of light vehicle movements (staff vehicles)*	
Provide a worst-case scenario for waste disposal and collection times per truck during peak periods.	Section 6.7.3 of the EIS TIA provides an analysis of the waste disposal and collection times per truck associated with the Proposal. As noted an Addendum TIA (provided in Appendix I) has been prepared to provide additional information regarding, and further assess, the potential traffic impacts associated with the Amended Proposal. The Addendum TIA provided an updated analysis of current and future proposed traffic generation in order to provide a robust, comprehensive and up to date analysis. This included an updated analysis of the worst-case scenario for peak vehicle durations onsite, assessing a duration of 30 minutes on-site, compared to the observed average of 17 minutes per vehicle (Section 4.4). Under the worst case scenario fourteen stacking spaces would be required, whereby an additional contingency of 7 stacking spaces remains available on the	Section 7 of the RtS EIS TIA (Appendix G of the EIS) Addendum TIA

Submission	Response / comment	Reference
	site. Even during the worst-case scenario, queuing of vehicles would be entirely accommodated and managed within the Proposal site and would not cause impact on Pembury Road.	(Appendix I of this RtS)
The Transport Impact Assessment estimates the average waste disposal and collection time per truck will be 20 minutes. Please confirm that the total time required for waste disposal and collection activities accounts for trucks manoeuvring on the site	As noted an Addendum TIA (provided in Appendix I) has been prepared to provide additional information regarding, and further assess, the potential traffic impacts associated with the Amended Proposal. As noted within the submission, the EIS estimated the average time a vehicle would spend on site would be 20 minutes. Up to date surveys of the existing conditions of the Proposal site including average time spent on site were undertaken for the Addendum Assessment. The entry and exit times of every vehicle at the Proposal site were surveyed for a full day of operation during a peak day in September 2017. Based on for the survey of existing operating conditions, a vehicle spends on average 17 minutes on-site between entering and exiting the Proposal site. This time accounts for time spent manoeuvring on site. A full breakdown of activities undertaken on-site is provided in Section 5.2.2 of the Addendum TIA. Section 1.4.9 of the updated project description (provided in Appendix A) provides a description of the processing capacity and timing for the operation of the Amended Proposal, including activities and timing for waste disposal and collection.	Section 7.7 of the RtS Amended Proposal description (Appendix A of this RtS) Addendum TIA (Appendix I of this RtS)
Provide justification that the loading of a B-double truck can occur in 15 minutes. Should longer loading times occur please demonstrate this will not impact on site operation or result in traffic queuing.	Following discussions between Department of Planning and Environment and the Site Operator, it has been determined that B-double trucks will be used to remove only residual waste from the site. The future facility will operate to a target-set resource recovery rate of approximately 80%. B-doubles will be required to transport the remaining 20% of waste from the site (i.e. residual waste). This equates to 44,000 tonnes of residual waste per annum or around 141 tonnes per day (based on 312 operational days in one year). The load-out capacity of a B-double truck is 35 tonnes on average. Based on this, the number of B-double trucks required to remove the waste from the site is approximately five trucks per day (141 tonnes of waste / 35 tonnes truck capacity) on average. Also following discussions with Department of Planning and Environment, the movement of B-double trucks at the site will be scheduled to occur outside of the operational peak period; that is, from 3:00pm to 10:00pm each day. A sensitivity analysis has been undertaken herein to identify the impacts of a potential delay in the waste collection operation should a longer loading time be required. As a worst-case scenario, the duration for loading of a B-double truck has been doubled from 15 minutes to 30 minutes. Inclusive of a two-minute	-

Submission	Response / comment	Reference
	weigh-in and weigh-out time (each), the total duration for a B-double truck on-site in the worst-case scenario will be 34 minutes. Based on a duration of 34 minutes on-site and back-to-back scheduling, the five B-doubles collecting waste per day would be able to complete the required waste collections in under 2 hours and 50 minutes. As a contingency, a grace period of 25 minutes between successive B-double trucks has been applied. On average, this means that there will be one B-double on-site per hour. In this scenario, five trucks would only require five hours out of seven hours to complete the necessary waste collection activities. The above demonstrates that even in the worst-case scenario, waste collection operations will not impact overall site operations nor cause traffic queuing on Pembury Road. Should there be an unforeseen delay in the waste collection process causing the truck load up times to double, the site will continue to operate as satisfactorily.	
Based on the proposed processing capacity, peak delivery times and the duration of time the truck is on-site, provide a worst-case scenario of vehicle stacking on site.	The Addendum TIA (provided in Appendix I) provides an assessment of the worst-case vehicle scenario, based on the updated existing conditions information and to assess the amendments made to the Proposal following the exhibition of the EIS, including provision of additional onsite stacking spaces. Section 4.4 of the Addendum TIA analysed stacking arrangements using an average duration of 30 minutes on-site. Fourteen stacking spaces would be required during the worst-case scenario. As noted in Section 6 of the Addendum TIA, the Amended Proposal would provide an increase in the number of stacking spaces provided onsite compared to the EIS Proposal, but would require fewer spaces (as a result of increased operational efficiency reducing predicted traffic volumes). As a result even during the worst-case scenario, queuing of vehicles would be entirely accommodated and managed within the Proposal site and would not cause impact on Pembury Road.	Section 7.7 of the RtS Addendum TIA (Appendix I of this RtS)
Provide further details regarding how public deliveries are co-ordinated and managed during peak times and in the event of an emergency plant shut down. Provide further details regarding the proposed operational measures to manage traffic arriving at the site during an	A Draft Traffic Management Plan (TMP) has been prepared to support the Amended Proposal (provided in Appendix I). The Draft TMP outlines management measures for the onsite operation of vehicle movements. In the event that the Amended Proposal site experiences equipment failure and congestion within the site an Emergency Plant Breakdown Operation Action Plan has been developed as outlined in Section 5.2 of the draft TMP. Section 1.4.9 of the updated project description (provided in Appendix A) provides a description of the processing capacity and timing for the operation of the Amended Proposal, including activities and timing for waste disposal and collection and contingency measures for circumstances of operational shut down.	Amended Proposal description (Appendix A of this RtS) Addendum TIA

Submission	Response / comment	Reference
emergency plant shutdown or similar.		(Appendix I of this RtS)
Demonstrate how conflicts with existing traffic on Pembury Road and Airds Road will be avoided during peak waste delivery periods to ensure the safety and efficiency of the road network is maintained. This should include a draft Traffic Management Plan.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received. The Amended Proposal would now include two inbound weighbridges at the western driveway, and a single outbound weighbridge at the eastern driveway. Provision of two inbound weighbridges, compared to a single inbound weighbridge as proposed in the EIS, would increase stacking capacity between Pembury Road and the two inbound weighbridges from two stacking spaces to five stacking spaces, including the additional weighbridge. This would improve operation of the Proposal site as it would increase the operator's ability to accept vehicles, clearing vehicles from the driveway and avoid the conflict of entering vehicles giving way to exiting vehicles as detailed in Section 4.3 and Section 4.4 of the Addendum TIA (Appendix I). The original Proposal proposed the use of the kerbside road space on Airds Roads as a lay-over area for vehicles on approach to the Proposal site which were not ready to be accepted at the Proposal site. Given that the Amended Proposal would be able to sufficiently accommodate the projected maximum number of vehicles in the peak hour under typical and worst-case conditions within onsite stacking spaces, this operation would no longer be required. Notwithstanding this, a draft TMP has been prepared to support the Addendum Proposal (provided in Appendix B of the Addendum TIA - Appendix I). The draft TMP shows that a traffic controller/ site personnel would manage pedestrian movements and vehicle movements at the Proposal site ingress.	Section 6 of this RtS Addendum TIA (Appendix I of this RtS)
Provide plans showing the swept paths of the front-end loader proposed to be used to move waste on-site and vehicles used for waste collection. The plans should include the stacking of vehicles within the site to demonstrate there is sufficient space onsite at peak periods.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received. These include amendments to further optimise the internal site layout and improve safety (demonstrated by amended swept path analysis) for vehicle movements within the Proposal site, including removal of minor internal walls and cladding. It is proposed to remove the northern wall of Shed C to ensure optimal swept paths can be achieved by heavy vehicles safely and efficiently. Movement of the excavator between Shed A and Shed C has been considered while assessing the site layout. The key movements for the excavator are as follows: • When there would be a waste collection truck loading-up adjacent to Shed A, the excavator would complete short movements between the waste storage bays within Shed A and a truck parked alongside Shed A.	Section 6 of the RtS Addendum TIA (Appendix I of this RtS)

Submission	Response / comment	Reference
	• When there is no waste collection truck loading-up, the excavator would transport waste from Shed C to Shed A. The scenario with the most constrained operating area on-site would involve the excavator moving between the two Sheds while a waste collection truck is positioned next to Shed A. This scenario would rarely occur since the excavator would be positioned at Shed A loading-up the parked waste collection vehicle. Thus, if this were to occur, this would become the 'worst-case' scenario for excavator movements on-site. The latter scenario (i.e. worst-case scenario) has been assessed as part of the draft TMP. As illustrated in Appendix A of the draft TMP, if required, there would be sufficient space for the excavator to move safely between both Sheds without impacting the parked trucks. Updated truck swept paths for the Amended Proposal have been prepared and are provided in Appendix C of the Addendum TIA (provided in Appendix I). Further a draft TMP (provided in Appendix I) has been prepared for the Addendum Assessment which outlines the operational management measures for onsite traffic movements. Traffic controllers would be onsite and would ensure any potential conflicts between heavy vehicles and front end loaders would be avoided.	
Demonstrate how conflicts with the largest vehicles entering the site and vehicles exiting the site will be managed.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received. The Amended Proposal would now have two inbound weighbridges at the western driveway, and a single outbound weighbridge at the eastern driveway. Provision of two inbound weighbridges would increase stacking capacity between Pembury Road and the two inbound weighbridges from two stacking spaces to five stacking spaces, including the additional weighbridge. This would improve operation of the Proposal site as it would increase the operator's ability to accept vehicles, clearing vehicles from the driveway and avoid the conflict of entering vehicles giving way to exiting vehicles as detailed in Section 4.3 and Section 4.4 of the Addendum TIA. Notwithstanding this, a draft TMP is provided in Appendix B of this Addendum TIA (provided in Appendix J). The draft TMP shows that a traffic controller/ site personnel would manage pedestrian movements and vehicle movements at the Proposal site ingress.	Section 6 of this RtS Addendum TIA (Appendix I of this RtS)
The Transport Impact Assessment states that two (2) spaces for articulated trucks (19 metre (m) trucks) are available for stacking. However, the Swept Path for	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received, including the provision of additional onsite stacking spaces. Section 4.4 of the Addendum TIA (provided in Appendix I) provides an updated analysis of the onsite stacking capacity of the Addendum Proposal. A mixture of vehicle sizes has been incorporated in the updated stacking plan to assess the Proposal site's stacking capacity as shown in Table	Section 6 of this RtS Addendum TIA

Submission	Response / comment	Reference
articulated trucks shows that only one 19 m truck could be stacked. Please provide clarification.	4.2 of the Addendum TIA. The split of stacking spaces for the various vehicles is based on the proportion of vehicles currently accessing the Proposal site. The split incorporates two stacking spaces for 19m articulated trucks (as given in Table 4.2). The stacking plan for the Amended Proposal site operation, the estimated number of stacking spaces required associated with a throughput of 220,000 tpa and swept paths are provided in Section 4.6, and Appendix C of the Addendum TIA. The revised swept path plans based on the Amended Proposal in Appendix C indicate two stacking spaces will be allocated for 19m articulated vehicles.	(Appendix I of this RtS)
Section 6.7.4.3 of the EIS states that the largest vehicle required to access the site will be a 25 metre B-double truck. The EIS advises that large vehicle movements can be undertaken without crossing the road centre line. However, the swept path analysis for 25 m B-double trucks show vehicles will use most of the road width of Pembury Road to access the site. Please clarify this discrepancy.	Section 4.6 of the Addendum TIA (provided in Appendix I) provides an updated swept path analysis based on the Amended Proposal. Swept paths show that a semi-trailer, truck and dog and B-double truck will be required to cross the centreline in order to adequately turn from Pembury Road. As per Australian Standard 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities it is considered acceptable for an articulated vehicle to take up most of the public road width when turning left into/ out of a driveway from a minor road, as shown in Section 4.6.	Addendum TIA (Appendix I of this RtS)
The Addendum Transport Impact Assessment report states that semitrailers, 19m truck and dogs and 25m B-doubles collectively comprise 25% of all vehicles (or 53 two way movements by collection vehicles) accessing the site and will be used for collection of waste. However section 1.4.9 of Appendix A of the RTS states that only up to 18 waste collection vehicles (in the peak worst case day) would access the Proposal site per day. Please clarify the	It is noted that the 18 waste collection vehicles per day stated in Section 1.4.9 of Appendix A of the RTS, is a typographical error. This number has been corrected to 21 waste collection vehicles per day as explained below. There are currently 211 two-way movements at the site of which 25% are generated by semi-trailer, truck-and-dogs and B-double trucks. Therefore, there are currently 53 two-way movements generated by these larger trucks. Based on traffic surveys undertaken at the site access, the proportion of traffic movements due to semi-trailers, truck-and-dogs and B-double trucks equals 25% (Section 2.3 of Addendum TIA). The average proportion of semi-trailers and truck-and-dogs which will both tip and collect waste will be 60% of these trucks. The future operation will result in 331 two-way movements; thus, 83 two-way movements will be generated by semi-trailer, truck-and-dog and B-double trucks.	Appendix A of the RTS Appendix I of the RtS

Submission	Response / comment	Reference
number of waste collection trucks and the numbers of semitrailers and 19m truck and dogs which would both tip and collect waste.	As discussed above, a total of five B-double trucks will collect residual waste from the site per day. Removing the 10 two-way movements generated by these five trucks (B-doubles) leaves 73 two-way movements (semi-trailers and tuck-and-dogs). This equates to around 37 semi-trailers and truck-and-dogs accessing the site per day for the purposes of delivering and collecting waste. Given that the site will achieve a resource recovery rate of approximately 80%, semi-trailers and truck-and-dogs would remove 176,000 tonnes of waste per annum from the site. Based on 312 operational days per year, this equates to around 564 tonnes per day. The load-out capacity of a truck-and-dog is 32 tonnes and a semi-trailer is 24 tonnes. Therefore, the average load-out capacity for collection trucks is 28 tonnes per vehicle. Based on this, the number of collection trucks required to remove waste from the site is 21 trucks per day (564 tonnes of waste / 28 tonnes truck capacity). Previously, the calculation in the EIS only considered the load-out capacity of 32 tonnes which is for truck-and-dogs. A load-out capacity of 32 tonnes generates a requirement of only 18 trucks (564 tonnes of waste / 32 tonnes truck capacity). Therefore, the 18 trucks per day is to be corrected to 21 trucks per day. In the future operation, there will 37 semi-trailers and truck-and-dogs accessing the site. Of these, 21 trucks will collect waste prior to exiting the site. This means that 57% of trucks tipping waste will also collect waste at the site. This closely aligns with the 60% proportion of large trucks tipping and collecting waste as stated above. It is noted that waste throughput and traffic flows can fluctuate from week to week across the year, causing slight fluctuations in the proportion of trucks tipping and collecting waste from week to week. Nonetheless, around 60% of semi-trailers and truck-and-dogs will undertake both activities.	
At our meeting of 24 January, the Department expressed concern that the swept path diagrams for waste collection trucks will be too tight. Consideration should be given to scheduling waste collection by 25 metre trucks to outside of the early morning peak unloading period to avoid conflicts with other vehicles on-site and the	A technical memo has been prepared addressing this concern and demonstrating adequacy of on-site swept paths. The technical memo has been appended to this document as Attachment D. Following discussions between Department of Planning and Environment and the Site Operator, waste collection activities by B-double trucks will be scheduled to occur outside of the site peak operation. Waste collection by B-doubles will take place after 3:00pm and before 10:00pm each day.	Attachment D of this document

Submission	Response / comment	Reference
potential for vehicles queuing on Pembroke Road.		
Detail measures to be used to avoid traffic conflicts in the event the enclosed conveyor fails or breaks down.	A Draft Traffic Management Plan (TMP) has been prepared to support the Amended Proposal (provided in Appendix B of the Addendum TIA - Appendix I). The Draft TMP outlines management measures for the onsite operation of vehicle movements. In the event that the Amended Proposal site experiences equipment failure and congestion within the site an Emergency Plant Breakdown Operation Action Plan has been developed as outlined in Section 5.2 of the draft TMP. An updated project description has been prepared to describe amendments made to the Proposal following the exhibition of the EIS and to provide additional clarification regarding the Amended Proposal's operations. Section 1.4.9 of the updated project description (provided in Appendix A) provides a description of the processing capacity and timing for the operation of the Amended Proposal, including activities and timing for waste disposal and collection and contingency measures for circumstances of operational shut down.	Amended Proposal description (Appendix A of this RtS) Addendum TIA (Appendix I of this RtS)
Parking along Airds Road by site vehicles associated with the proposal will not be permitted due to the potential impact on road safety and nearby intersections and impact on surrounding businesses. Provide details of alternative solutions.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received. The Amended Proposal would now include two inbound weighbridges at the western driveway, and a single outbound weighbridge at the eastern driveway. Provision of two inbound weighbridges, compared to a single inbound weighbridge as proposed in the EIS, would increase stacking capacity between Pembury Road and the two inbound weighbridges from two stacking spaces to five stacking spaces, including the additional weighbridge. This would improve operation of the Proposal site as it would increase the operator's ability to accept vehicles, clearing vehicles from the driveway and avoid the conflict of entering vehicles giving way to exiting vehicles as detailed in Section 4.3 and Section 4.4 of the Addendum TIA (Appendix I). The original Proposal previously proposed the use of the kerbside road space on Airds Roads as a lay-over area for vehicles on approach to the Proposal site which were not ready to be accepted at the Proposal site. Given that the Amended Proposal would be able to sufficiently accommodate the projected maximum number of vehicles in the peak hour under typical and worst-case conditions within onsite stacking spaces, this operation would no longer be required. Notwithstanding this, a draft TMP has been prepared to support the Addendum Proposal (provided in Appendix B of the Addendum TIA - Appendix I). The draft TMP shows that a traffic controller/ site personnel would manage pedestrian movements and vehicle movements at the Proposal site ingress.	Section 6 of this RtS Addendum TIA (Appendix I of this RtS)

Submission	Response / comment	Reference
Confirm that Pembury Road will not be used for the parking of site vehicles during site operation. Provide further justification for the reduced provision of car parking on site. Demonstrate compliance can be achieved with the Building Code of Australia and Australian Standard AS2890 - Parking Facilities requirements in relation to the provision of accessible car parking.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received, including the provision of additional onsite car parking. The Amended Proposal includes provision of 17 car parking spaces, including one accessible parking space; increased from 10 spaces previously proposed. Given that the maximum number of personnel onsite at any one time would be 15 people, the provision of 17 car parking spaces is sufficient. No employees would be required to park in Pembury Road. Applying BCA's accessible parking rate generates a requirement to provide 0.16 accessible parking spaces, or at least one parking space, for the Amended Proposal. An accessible space would be located between the ingress driveway and site office as shown in Section 4.7 of the Addendum TIA.	Section 6 of the RtS Addendum TIA (Appendix I of this RtS)
The RTS states up to 30 construction personnel will be required on site at any time for the construction of the amended development. Detail the parking arrangements for construction staff during the 4 month construction period and confirm the peak periods of construction related traffic.	As noted in the updated project description provided in Appendix A of the RTS submission, up to 30 construction personnel may be required on site at any one time. However, this would occur infrequently and personnel numbers on most days are likely to be fewer than this (as few as five). The peak construction period would occur for several weeks within Stage 2 (construction of the enclosed processing shed, site office, amenity building and ancillary facilities) and the busiest days would be when multiple construction activities are occurring at once. During construction, the Proposal site would not be operational and traffic movements would be limited to construction personnel and deliveries. As the Proposal is located within an industrial precinct and current operational movements would cease during the construction period, construction of the Proposal would not result in any appreciable increase in traffic impacts on the surrounding network. Traffic during construction would be managed through the Construction Traffic Management Plan to be developed for the Proposal. During construction, parking would be made available on the site in accordance with the Construction Traffic Management Plan. In some circumstances, construction personnel may be required to park on Pembury Road to avoid conflict with active works areas on the Proposal site and to maintain safety. However, this would occur infrequently, would be short term and would not result in any significant impacts on the local network.	Appendix A of the RtS
It is acknowledged that third party agreements may be subject to change. Notwithstanding, further clarity is needed on public	Arrangements with third-party operators disposing of waste or facilities receiving waste are subject to change due to market and regulatory influences. Contractual arrangements between the applicant and third-party operators are therefore regularly subject to change. Third party vehicles may access the site without a prior	-

Submission	Response / comment	Reference
deliveries of waste to the site, including the expected proportion of vehicles that will not be owned by Bingo.	contractual arrangement in place. Provision of any contractual arrangements would therefore not provide current or all-encompassing information on public deliveries of waste to the Minto facility. Waste disposal and collection vehicles would originate from various locations across the greater Sydney region. The Minto SSD proposal is a single Resource Recovery Facility within a broader network of facilities owned and operated by Bingo Industries. The Minto facility forms part of a network of twelve facilities located throughout NSW and operated by related entities of the site operator. The operator has the ability to track waste throughout the waste cycle which is an integral part of day to day business. The management of waste is not confined to individual sites, but in the case of the operator, run as a network, with scheduling, fleet management and waste / vehicle tracking coordinated from a dedicated resource and scheduling centre. For the majority of vehicle movements associated with site operations, the timing of a delivery of waste, the volume and nature of the waste being transported is known and planned for, well in advance of arriving at the Minto site. In this regard, waste deliveries to the Proposal site, undertaken by the site operator's fleet, would be scheduled with the operator prior to the waste leaving its point of origin. The site operator utilises a live logging system which allows customers to log a request via telephone or via a mobile application (App) which is exclusive to the site operator. Although public deliveries are not required to book-in ahead of time, they would be encouraged to do so. All requests are centrally managed by the Customer Service and Allocations Team at the Head Office in Auburn. The Allocations Team identifies suitable vehicles to collect the waste and designate the facility that is best suited to accept the delivery. The Allocations Team makes these decisions based on the information provided by the customer at the time of request. The Allocations Team is also responsible for co-ordinating the timing of waste collection and delivery. The site operator's fleet are tracked via GPS through the operator's mobile app. Hence, trucks can be diverted to other nearby facilities by the site operator, if required. A Draft Traffic Management Plan has been prepared for the Minto facility which outlines management measures for the onsite operation of vehicle movements. An Emergency Plant Breakdown Operation Action Plan has been developed in the event that the facility experiences equipment failure and congestion within the site. In a period of extended shutdown of plant and equipment, waste can be redirected to other facilities within the broader network, without compromising the broader Sydney recycling network. Bingo has the ability to readily move waste between facilities using Bingo bulk haulage trucks or to redirect Bingo trucks accordingly.	

Submission	Response / comment	Reference
Air quality		
Provide an assessment of the dust emissions generated by off-site vehicle movements associated with the proposal, including cumulative impacts.	An Addendum Air Quality Impact Assessment (provided in Appendix H of this RtS) has been prepared to provide additional information regarding, and to further assess, the potential air quality impacts associated with the Amended Proposal. Vehicles travelling to the site would originate at a number of construction and infrastructure sites across the Sydney region. These vehicles have the potential to generate off-site dust emission from residual materials left on their wheels from the site of origin. However, the management of tracked dirt at each of these sites is outside of the scope of this RtS. Management of tracked dirt at each of these sites is the responsibility of that site and would be managed through the site specific planning and approvals documentation for each site. As described in Section 6 of this RtS, the Amended Proposal includes the provision of an inground wheel wash at the site exit to manage tracked dirt from the site and minimise off-site dust emissions. As such, the potential for wheel-generated dust emissions from vehicles leaving is considered to be minimal and a detailed impact assessment of off-site dust generation is not warranted. Further, all vehicle loads are covered to minimise dust being generated when vehicles are in transit. In addition to the above a street sweeper would be maintained on site as a contingency measure for usage as/when required.	Section 6 of this RtS Addendum AQIA (Appendix H of this RtS)
Sufficient discussion should be provided regarding the risk of asbestos dust emissions to air.	As described in Section 4.2 of the EIS and Section 1.4.11 of the Amended Proposal description (Appendix A of this RtS), the Proposal would not accept hazardous materials, including asbestos. Vehicles would be pre-screened at the entry weighbridge to determine whether the load is compliant for acceptance. Any load deemed non-compliant would exit the Proposal site via the exit weighbridge and the wheel wash. However, on occasion items may be discovered in the received materials that contain hazardous substances. These non-complying materials will be managed in accordance with the asbestos and non-complying waste management procedures. Hazardous materials would be securely stored (until they can be disposed of at an appropriately licenced facility) within the hazardous materials bins on the eastern side of the tipping floor. As the site would not accept hazardous materials and in consideration of the measures outlined above, the risk of asbestos dust emission to air is very low.	Section 4.2 of the EIS Amended Proposal description (Appendix A of this RtS)
No monitoring of existing operations is provided to show air quality effects of existing operations. This should be	The AQIA (Appendix M of the EIS) and Addendum AQIA (Appendix H of this RtS) have been undertaken in accordance with NSW Environment Protection Authority (NSW EPA) *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (Published January 2017).	EIS AQIA (Appendix

Submission	Response / comment	Reference
provided in order to test the accuracy of modelling assumptions.	Emissions factors for site activities have been derived from the NPI for Mining and USEPA AP42 in the absence of industry-specific factors relating to waste handling. As the USEPA AP42 document for aggregate handling are related to the handling of overburden material and it is considered that the material to be handled as part of the Project operations will result in the emission of significantly less particulate emissions, the resulting assessment is considered to be conservative. A detailed description of emission factors and modelling methodologies is provided in Appendix M of the EIS (AQIA). The Addendum AQIA identified that the amendment made to the Proposal would have the potential to reduce PM_{10} and $PM_{2.5}$ emissions by approximately 46% and 23% respectively. The Addendum AQIA concluded that potential pollutants, including TSP, Dust, PM_{10} and $PM_{2.5}$ would all be below the relevant assessment criteria and are generally, relatively lower than those predicted in the EIS.	M of the EIS) Addendum AQIA (Appendix H of this RtS)
Provide justification as to why existing air quality monitoring was not used in the modelling.	Existing air quality data for the Proposal site is not available. The AQIA (Appendix M of the EIS) and Addendum AQIA (Appendix H of this RtS) have utilised data from nearby NSW Office of Environment and Heritage (NSW OEH) monitoring stations to establish the existing air quality at the Proposal site. Usage of representative data is common practice and is in accordance with NSW Environment Protection Authority (NSW EPA) Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (Published January 2017).	Appendix M of the EIS Appendix H of the RtS
Discussion of the effectiveness of dust mitigation measures is required, in particular the use of a street sweeper.	As noted and described in Section 6 of this RtS a number of amendments have been made to the Proposal following the exhibition of the EIS in response to submissions received, including provision of additional measures to manage tracking of dust from exiting vehicles. Key environmental controls included in the Amended Proposal design include: • Construction of a shed and roof structure to enclose the existing waste processing and handling area • Installation of a new 20 m long weighbridge and in-ground wheel wash at the vehicle egress point • Extension of the dust suppression and sprinkler system across the new shed and its openings. The Addendum AQIA identified that the amendment made to the Proposal would have the potential to reduce PM_{10} and $PM_{2.5}$ emissions by approximately 46% and 23% respectively. The Addendum AQIA concluded that potential pollutants, including TSP, Dust, PM_{10} and $PM_{2.5}$ would all be below the relevant assessment criteria and are generally, relatively lower than those predicted in the EIS.	Section 6 of this RtS Amended Proposal description (Appendix A of this RtS)

Submission	Response / comment	Reference
	With the provision of the key environmental controls, considered industry best practice, and mitigation measures as outlined above, the Amended Proposal is not anticipated to have a significant dust impact on nearby receptors. Nevertheless, the street sweeper would be maintained on site as a contingency measure for usage as/when required. Further, during the Applicant's meeting with the EPA and DP&E on 30 August 2017 the EPA indicated that the proposed enclosure of the shed would, in their view, eliminate any air quality issues arising from the handling, processing, loading and unloading of waste at the facility.	
Noise		
The operational noise assessment is based on waste processing operating at 2,000 tonnes per day as well as up to 9 trucks idling on site and 8 trucks arriving and leaving during any 15-minute period. Please provide a revised operational noise assessment which accounts for a worst-case scenario should waste disposal and collection times be extended during peak periods.	An Addendum Noise and Vibration Impact Assessment (NVIA) (provided in Appendix G of this RtS) has been prepared to provide additional information regarding, and further assess, the potential noise and vibration impacts associated with the Amended Proposal. The addendum operational noise assessment has been undertaken in accordance with the NSW EPA Industrial Noise Policy (INP). The addendum assessment presented an operational scenario during the Morning shoulder (6am – 7am), daytime (7am – 6pm) and evening (6pm – 10pm) periods that are considered worst-case scenario, being: • Waste processing vehicles fully operational (equivalent to 2000 tonnes/day) sorting waste and loading trucks • Trucks dropping off / picking up waste (9 Trucks idling, up to 8 trucks arriving and leaving during any 15 minute period at a speed of 10km/h) If this scenario were annualised the facility would be processing in excess of 600,000 tonnes/year, which far exceeds what is proposed. As such, this scenario is considered to be highly conservative.	Addendum NVIA (Appendix G of this RtS)
Provide a detailed assessment of the development against the NSW EPA Road Noise Policy which includes an assessment of traffic noise on all surrounding roads.	The Addendum NVIA (provided in Appendix G of this RtS) includes a detailed traffic noise assessment, prepared in accordance with NSW EPA Road Noise Policy (RNP). In accordance with the RNP, road traffic noise impacts from the Amended Proposal were assessed on Campbelltown Road and Pembroke Road, as sub-arterial roads with adjacent sensitive receptors. An assessment of existing road traffic noise identified that noise levels at the most noise affected receivers along these roads exceeds the RNP day and night criteria. The RNP 2 dBA 'allowance' criterion therefore applies for the amended Proposal.	Addendum NVIA (Appendix G of this RtS)

Submission	Response / comment	Reference
	The addition of vehicles from the Amended Proposal would increase road traffic noise levels by 0.1 dBA and 0.2 dBA during the daytime (7am – 10pm) and morning shoulder (6am – 7am) periods respectively on Campbelltown Road and Pembroke Road. These increases are considered negligible and are within the 2dBA 'allowance' criterion. According to EPA's Road Noise Policy, a noise increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person.	
Provide an assessment of the off-site traffic noise emissions from heavy vehicles (with a gross weight greater than 60 tonnes) which are proposed to use Pembroke Road.	The Addendum Noise and Vibration Impact Assessment (provided in Appendix G of this RtS) includes a detailed traffic noise assessment which has been, prepared in accordance with NSW EPA Road Noise Policy (RNP). This assessment includes consideration of the road traffic noise emissions from all vehicles (both heavy and light) from the Amended Proposal on Pembroke Road.	Addendum NVIA (Appendix G of this RtS)
Water quality		
Provide further information on the management and disposal of leachate.	An updated assessment of impacts to water quality from the Amended Proposal has been included in Section 7.5.2 of this RtS. Water within the Amened Proposal site would be capture/conveyed through one of several systems.	Section 7.5.2 of this RtS Appendix D of this RtS
Provide further details of the existing and proposed water quality devices to ensure they are sufficient to maintain water quality, especially with the increase in size of stockpiles and tracked material on site.	Water captured within the processing shed would be treated as leachate. Proposal buildings have been designed to exclude stormwater flows and the grading and drainage of internal hardstand areas within sheds has been designed to contain any leachate. Bunds would be constructed at the shed openings to provide separation of leachate and stormwater. Water within the processing shed would drain to a blind sump within the processing area. Existing pits as indicated on the stormwater design, would be completely sealed to prevent water entering the pits. Leachate collected within the blind sump would be pumped out and trucked for disposal at an appropriately licensed facility.	
Demonstrate the proposed stormwater collection and disposal system will have sufficient capacity to accommodate increases in peak flow rates and runoff volumes from the proposal and manage firewater.	Updated stormwater designs, demonstrating how stormwater would be separated from leachate (water collected within enclosed shed areas) have been provided in Appendix D of the RtS. Roof water from the existing sheds would continue to be managed by the existing stormwater system. This water is currently directed into an underground 100 kL rainwater tank for re-use at the site. This rainwater tank is used to reduce the demand for potable water by re-use for external hose cocks and landscape water systems. The MUSIC model developed for the EIS and updated for the Amended Proposal included an assessment of water quantity requirements at the site. The model identified that 99% of the non-potable	

Submission	Response / comment	Reference
Provide details of measures used on site to recycle water for operations.	demand for the Amended Proposal (other than for dust suppression) would met by rainwater reuse. Captured untreated rainwater would not be used for the dust suppression system as it would not meet the water quality specifications for misters and may result in blockages. Supply in excess of the capacity of the re-use tank would be directed to a proprietary stormwater treatment device (Stormwater 360 Filter Chamber) before discharging offsite into the Campbelltown City Council (CCC) stormwater system which flows into Bow Bowing Creek adjacent to the site. Roof water from the new roof to be constructed as part of the Amended Proposal would be directed to the Stormwater 360 Filter Chamber for treatment prior to discharge offsite into the Campbelltown City Council (CCC) stormwater system. Water collected from external hardstand areas would be conveyed by the upgraded pit/pipe network (see Appendix D of this RtS). In addition to the pit/pipe stormwater system, bunding also exists on either side of the site to ensure that runoff is contained on-site and directed to the stormwater treatment system. Existing stormwater pits are fitted with EnviroPod Gross Pollutant Traps (GPTs) to provide primary treatment of the site runoff prior to the downstream StormFilter stormwater treatment system. Any increase in peak flow rates and runoff volumes from the Amended Proposal are anticipated to be negligible since the increase in impervious area associated with the additional car parks is very small. The provision of an enclosed shed would not significantly change flow rates or volumes as it would be covering an area which has a similarly impervious nature (concrete slab). A small amount of additional storage capacity will be created within the proposed stormwater pit/pipe network and runoff. As all stockpiles would be contained within the enclosed shed (which would be captured by the leachate system described above) the increase in proposed throughput would not result in a change to water quality outcomes as identified in the EIS. The changes to runoff from the increase in roof water from the new shed have been accommodated for by the provision of two additional filters within the Stormwater 360 Filter Chamber. An updated MUSIC model has been developed to assess changes to water quality from Amendments to the Proposal and the results are presented below.	
Provide further details and updated plans showing how leachate from within the processing shed will be contained and separated from other stormwater		

Submission	Response / comment				Reference
	Pollutant	Target %	Proposed Development		
			Predicted Reduction in pollutant load %	Target achieved	Predicted Mean Annual Discharge Loads (kg/yr)
	Gross pollutants	N/A	94.2	Yes	10.6
	TSS	80	87.6	Yes	65
	TP	45	64.7	Yes	0.53
	TN	45	45	Yes	8.3
	As identified above the proposed treatment system will meet Council's objectives for gross pollutants, TSS, TP and TN for the proposed development.				
Supporting documentation					
Provide a copy of the stamped approved plans for Development Consent No. 1/DA2002.	The Amended Proposal seeks approval for all operational and built form elements of the Minto RRF, and will supersede any previous approvals, including DA No. 1/DA2002. A complete description of the Amended Proposal is provided in Appendix A of the RtS.				Appendix A of the RtS
The Department's review of aerial imagery of the site shows that the enclosed conveyor included in the proposal was recently constructed. Please provide	The Amended Proposal seeks approval for all operational and built form elements of the Minto RRF including all plant and equipment (which includes the conveyor system). A complete description of the Amended Proposal is provided in Appendix A of the RtS.				Appendix A of the RtS

Submission	Response / comment	Reference
evidence the enclosed conveyor has development consent.		
The Department wishes to clarify that you are requesting retrospective approval for the conveyor and existing processing plant in this SSD application. To aid the Department's assessment of the suitability of permitting a retrospective approval for the conveyor and processing plant, please provide a rationale based on a review of the pertinent legislation and case law.	We confirm that the Amended Proposal seeks approval of the conveyor and the processing machinery. As discussed with DPE on 19 February 2018, there exists power in the Environmental Planning and Assessment Act 1979 for the DPE to grant such approvals. We note, for the avoidance of doubt, that the conveyor and the processing machinery has been taken into account in the EIS and the assessments supporting the Amended Proposal.	-
Revise the substation location to provide a setback from the front boundary and provide additional landscaping along the Pembury Road frontage to screen the substation.	The substation is appropriately located for easy and unobstructed access by the service provider and for maintenance in accordance with Endeavour Energy requirements. .	N/A
Revise the substation location from the front boundary and provide additional landscaping along the Pembury Road frontage to screen the substation as well as the amenities and office buildings.	As discussed with DPE on 19 February 2018, the locality of the substation is strategically positioned so that the service provider can easily access it without entering the property. Any landscaping in front of the substation will interfere with the service providers access to the substation. Apart from this, it is believed that there is sufficient landscaping on the front setback to ensure the industrial amenity of the locality is maintained.	-
Provide justification as to why no intrusive investigations or soil tests were undertaken as part of	Section 6.7 of the EIS presents assessment findings for soil and groundwater contamination risks associated with the Proposal. The results of the Phase 1 investigation completed by SLR in November 2016 (Appendix J of EIS) identified the following:	Appendix J of the EIS

Submission	Response / comment	Reference
the Phase 1 Contaminated Land Investigation.	• Potential Areas of Concern relating to past and/or current land use activities • The likelihood of contamination being present on the site was considered low to medium • The site is suitable for the current and proposed use of commercial/industrial • The site is covered with hardstand which limits infiltration of contaminants into the on-site soil • Need for soil sampling should the proposed development result in significant soil disturbance, so an assessment can be made in relation to the safety of workers. During construction, the existing site levels would be retained and any ground disturbance would be minimal and limited to excavation for footings only. It is unlikely that groundwater would be affected at the depths proposed for footings. There is negligible if any risk of coming into contact with groundwater let alone contamination of groundwater from activities associated with construction of footings as the new structures are demountable and do not require significant excavation. Therefore, no intrusive investigations are required.	
Provide owner's consent for the lodgement of the SSD application in a separate letter. The owner's consent letter must be on company letterhead, reference the Australian Business Number of the owner, the address of the site and be signed by two directors or a company secretary and a director.	A land owners consent letter containing the specified detail has been prepared and will be submitted to DPE.	N/A
Please ensure the concerns raised by NSW Fire and Rescue's submission dated 9 February 2018 are addressed and provide an assessment against the relevant National Construction Code performance requirements or the Deemed to Satisfy	NSW Fire and Rescue's submission (date 9 February 2018) has been reviewed and responded to in Section 4 of the RtS.	Section 4 of the RtS

Submission	Response / comment	Reference
provisions for a large isolated building.		
Provide floor plans and elevation plans for all existing structures on site.	Plans showing the layout for all existing structures on site have been provided in Attachment C of this letter.	Appendix C of this letter

ATTACHMENT B

Bingo Industries Limited
ABN: 72 617 748 231

PO Box 7, Enfield NSW 2136
T: 02 9737 0308 F: 02 9737 0351
enquiries@bingoindustries.com.au
www.bingoindustries.com.au

Bingo Property Pty Ltd ABN 37 617 664 212

30 November 2017

Chloe Dunlop
Senior Planning Officer
Industry Assessments
Department of Planning & Environment
320 Pitt Street
SYDNEY NSW 2001

Dear Ms Dunlop

Project: Minto Resource Recovery Facility SSD Application (SSD 7462)
Address: 13 Pembury Road, Minto
Lot/DP: Lot 1/DP1013852

We refer to the above SSD Application.

Bingo Property Pty Ltd (ABN 37 617 664 212), as landowner of the above Property, hereby consents to the lodgement of the SSD application by Bingo Recycling Pty Ltd (ABN 82 163 894 362) as Applicant.

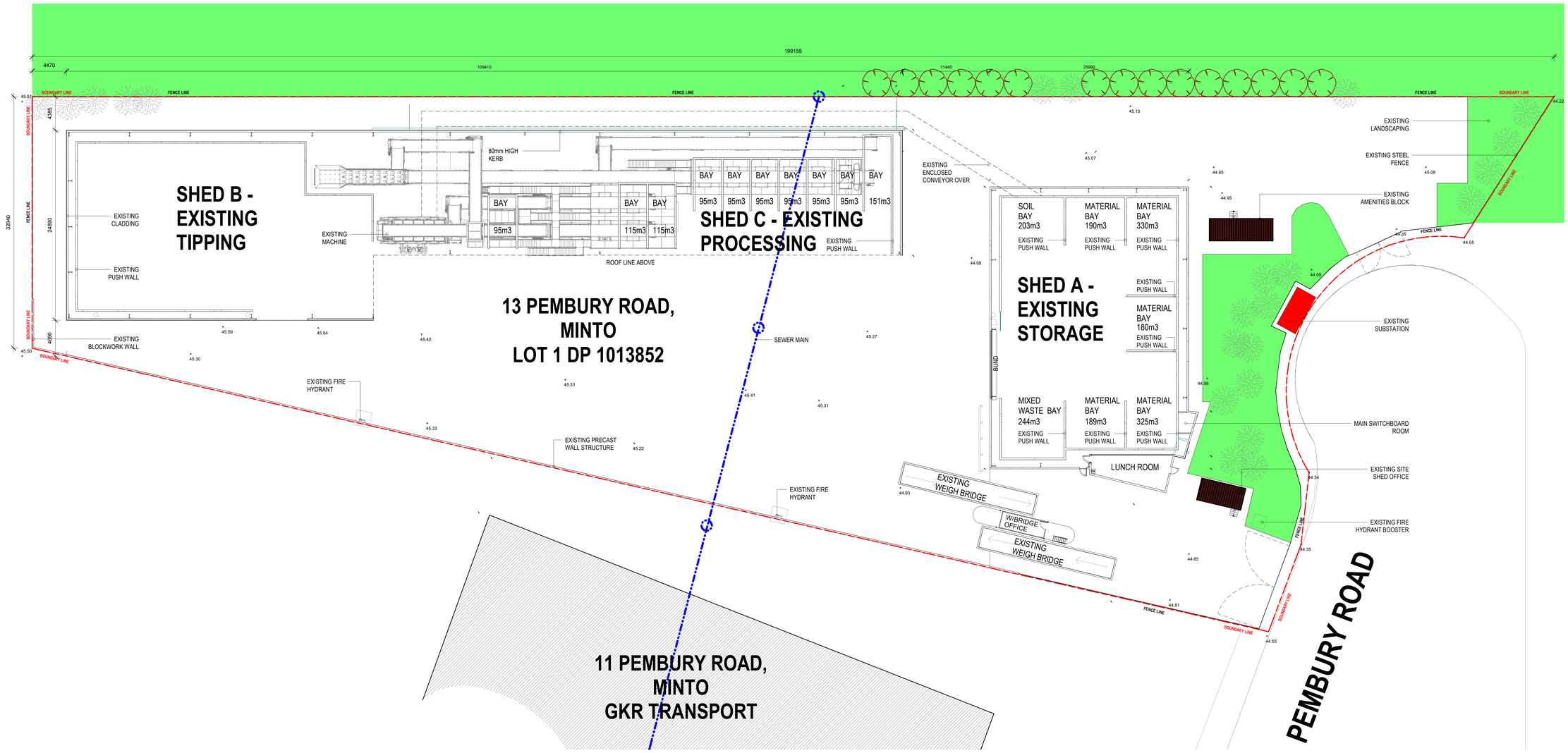
If you have any questions, please do not hesitate to contact Ron Chio, Company Secretary & Legal Counsel, on (02) 9737 0308 or by email: ron.chio@bingoindustries.com.au.

Yours sincerely,

Daniel Tartak
Director
On behalf of Bingo Property Pty Ltd

Ronald Chio
Secretary
On behalf of Bingo Property Pty Ltd

ATTACHMENT C



1 EXISTING GROUND FLOOR
1 : 200

DEWCAPE
DISTINCTION IN BUILDING

BINGO INDUSTRIES

No.	Description	Date
B1	FINAL ISSUE	05.02.2018

NORTH POINT:

SCALEBAR: 0 2 4 6 8 10 m

CLIENT: BINGO

PROJECT: 13 PEMBURY ROAD MINTO

SHEET NAME: EXISTING GROUND FLOOR PLAN

Project number: MI1004

Date: 02/03/18

STAGE: DEVELOPMENT

Drawn by: Author | Checked by: Checker

SHEET No: SSD07 | REVISION: B1

Scale: 1 : 200 @ A0

9/03/2018 3:20:10 PM

ATTACHMENT D

Our Ref: 15016

6 February 2018

Skylife Properties
PO Box 114 Enfield
NSW 2136

Attention: Mr Mark Tartak

Dear Mark,

RE: 13 PEMBURY ROAD, MINTO
SWEPT PATH ANALYSIS – RESPONSE TO DEPARTMENT OF PLANNING

As requested, please find herein The Transport Planning Partnership's (TTPP) response to Department of Planning and Environment's query regarding 25/26m B-double truck swept paths internal to the site located at 13 Pembury Road, Minto.

B-double (25/26m long) trucks will be used to remove waste from the site. Internal to the site, the vehicle's travel path runs between Shed A and Shed C.

This letter documents the minimum required manoeuvring clearance as set out in Australian Standard (AS) 2890.2 for a 25/26m B-double truck designed in-line with Austroads Guidelines. This letter also identifies the additional available clearances to physical obstructions along the travel path between Shed A and Shed C.

An analysis of swept paths for a 25/26m B-double truck with 15m turn radius has been undertaken using a forward manoeuvring speed of 10km/h and reverse manoeuvring speed of 5km/h. In accordance with Australian Standards, a 0.3m clearance shall be provided on both sides of a vehicle undertaking low speed manoeuvres (AS 2890.2, Clause 5.4). These clearances are shown as broken lines on the swept path plans contained in Attachment One of this letter.

In addition to the minimum required 0.3m clearance, the swept path analysis indicates that a B-double truck is able to manoeuvre on site with an additional clearance of up to 2.791m to physical obstructions. Additional clearances, on top of the standard 0.3m, are shown on the swept path plans contained in Attachment One. A summary of these extra clearances is provided in Table 1.

Table 1: Summary of Additional Vehicle Clearances

Swept Path Plan Reference	Description	Clearance to Shed A (Right side of Vehicle)	Clearance to Shed C (Left side of Vehicle)
Figure 1	25m B-Double Swept Path via Inbound Weighbridge (1) Inbound Movement	2.274m	1.347m
Figure 2	25m B-Double Swept Path via Inbound Weighbridge (1) Outbound Movement	2.122m	1.106m
Figure 3	25m B-Double Swept Path via Inbound Weighbridge (2) Inbound Movement	2.700m	1.342m
Figure 4	25m B-Double Swept Path via Inbound Weighbridge (2) Outbound Movement	2.122m	1.106m
Figure 5	25m B-Double Swept Path via Inbound Weighbridge (1) Inbound Movement	0.891m	1.851m
Figure 6	25m B-Double Swept Path via inbound weighbridge (1) Outbound Movement	2.791m	0.904m
Figure 7	25m B-Double Swept Path via Inbound Weighbridge (2) Inbound Movement	2.432m	1.258m
Figure 8	25m B-Double Swept Path via Inbound Weighbridge (2) Outbound Movement	2.791m	0.904m

The above summary indicates that there will be, at least, 0.891m clearance to any physical obstructions on top of the standard 0.3m clearance. This is measured on the left side of the vehicle as it reverses into position alongside Shed C.

The swept path analysis demonstrates that a B-double truck will always have a clearance equal to or greater than 1.191m (0.891m + 0.3m) measured between the vehicle body and a physical obstruction along its travel path between Shed A and Shed C.

Further to this, a feature of the swept path analysis software, Autodesk, is that it is highly conservative. Previously, TTPP staff have carried out field trials to demonstrate that the manoeuvring capability of articulated heavy vehicle exceed those as modelled in Autodesk. In consideration of this, swept paths of a 25/26m B-double truck internal the subject site will be more than adequate.

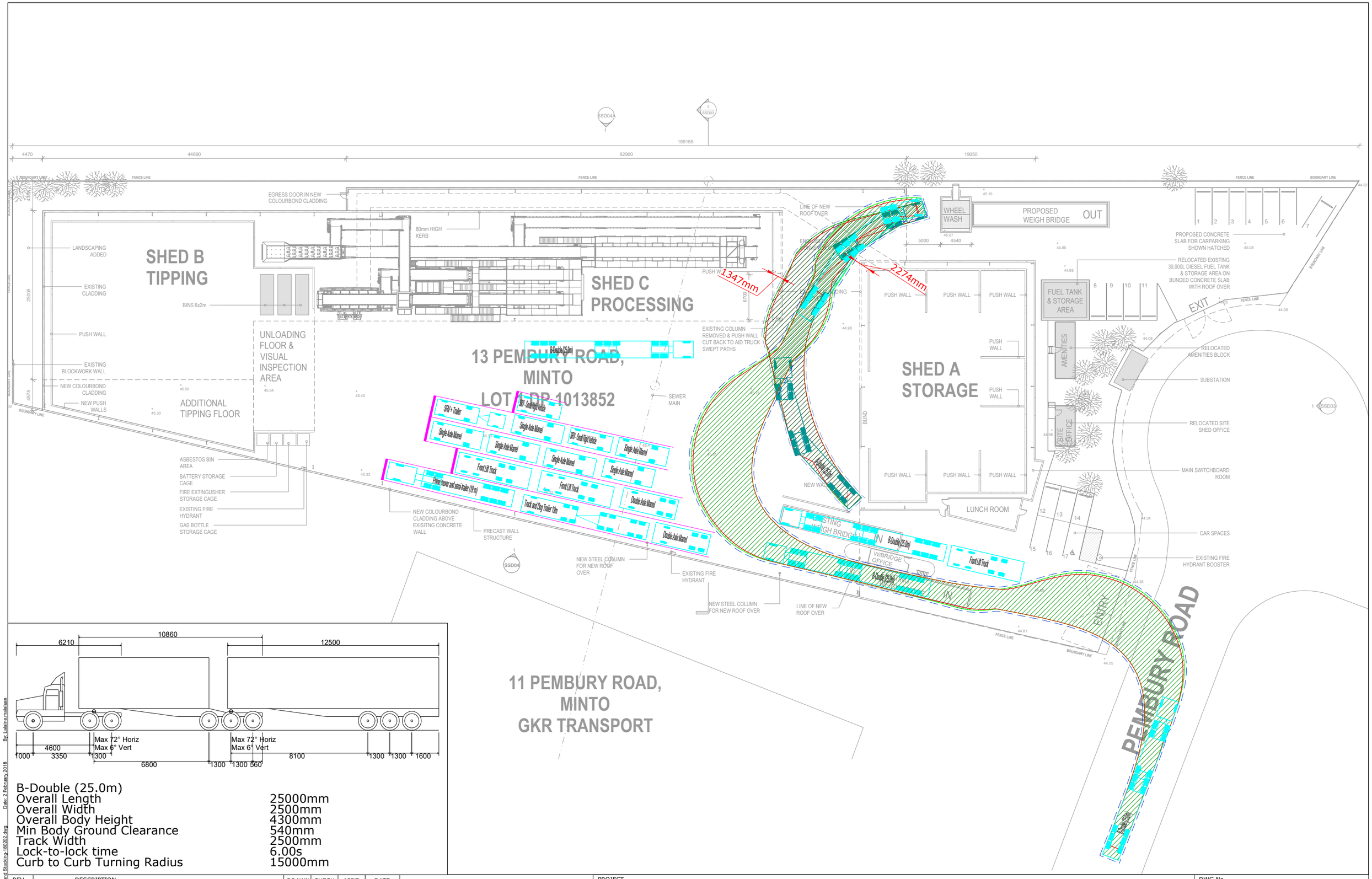
We trust the above is to your satisfaction. Should you have any queries regarding the above or require further information, please do not hesitate to contact the undersigned on 8437 7800.

Yours sincerely,

Wayne Johnson
Associate Director

Attachment One

Swept Path Analysis



B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

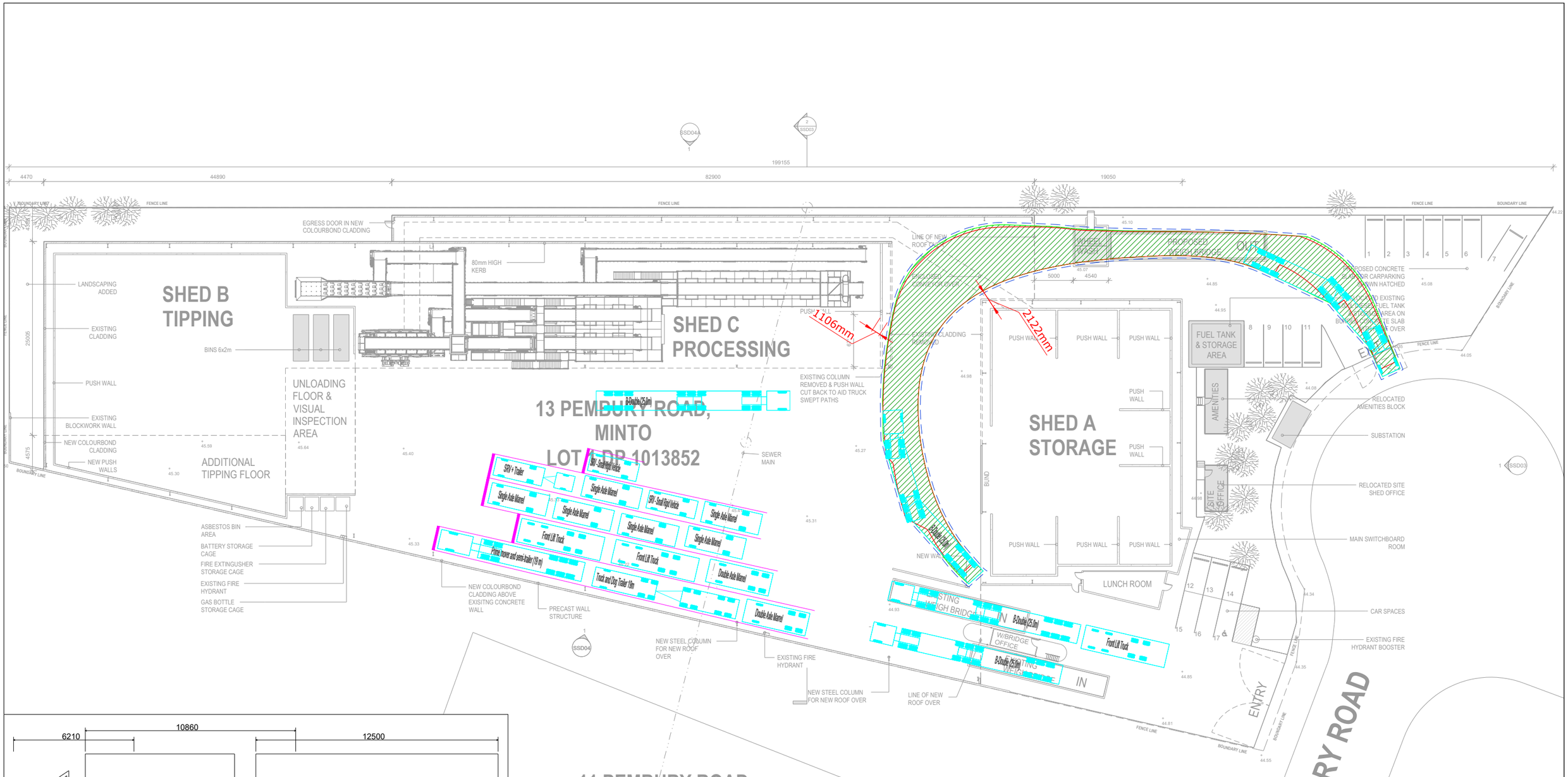
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (1)
INBOUND MOVEMENT

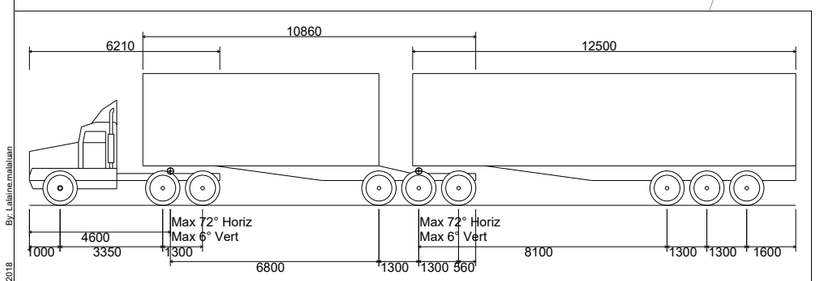
DWG No.: FIGURE 1

DATE STAMP: 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.maliuan





B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

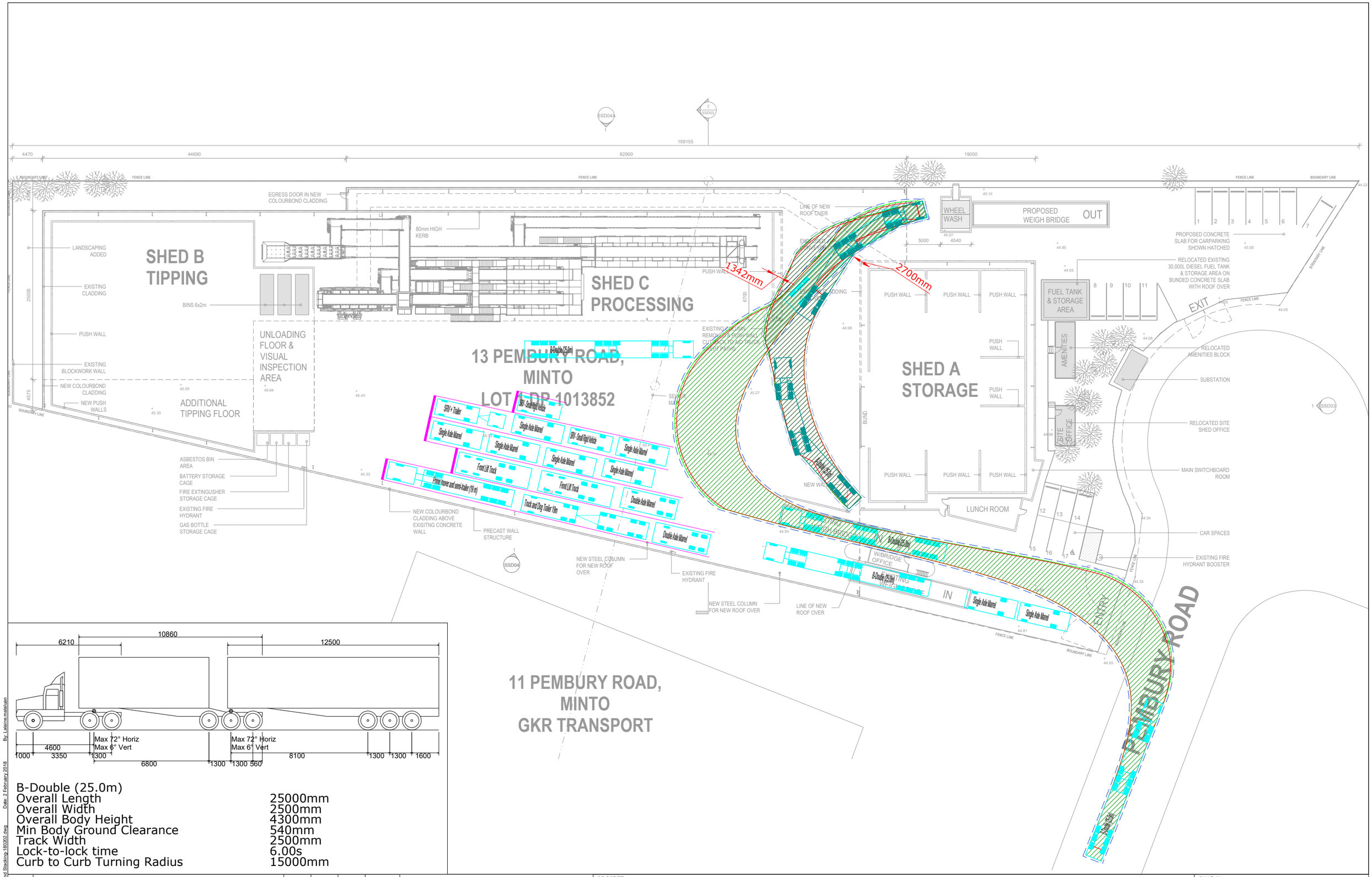
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (1)
OUTBOUND MOVEMENT

DWG No. FIGURE 2

DATE STAMP 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.maliuan



B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

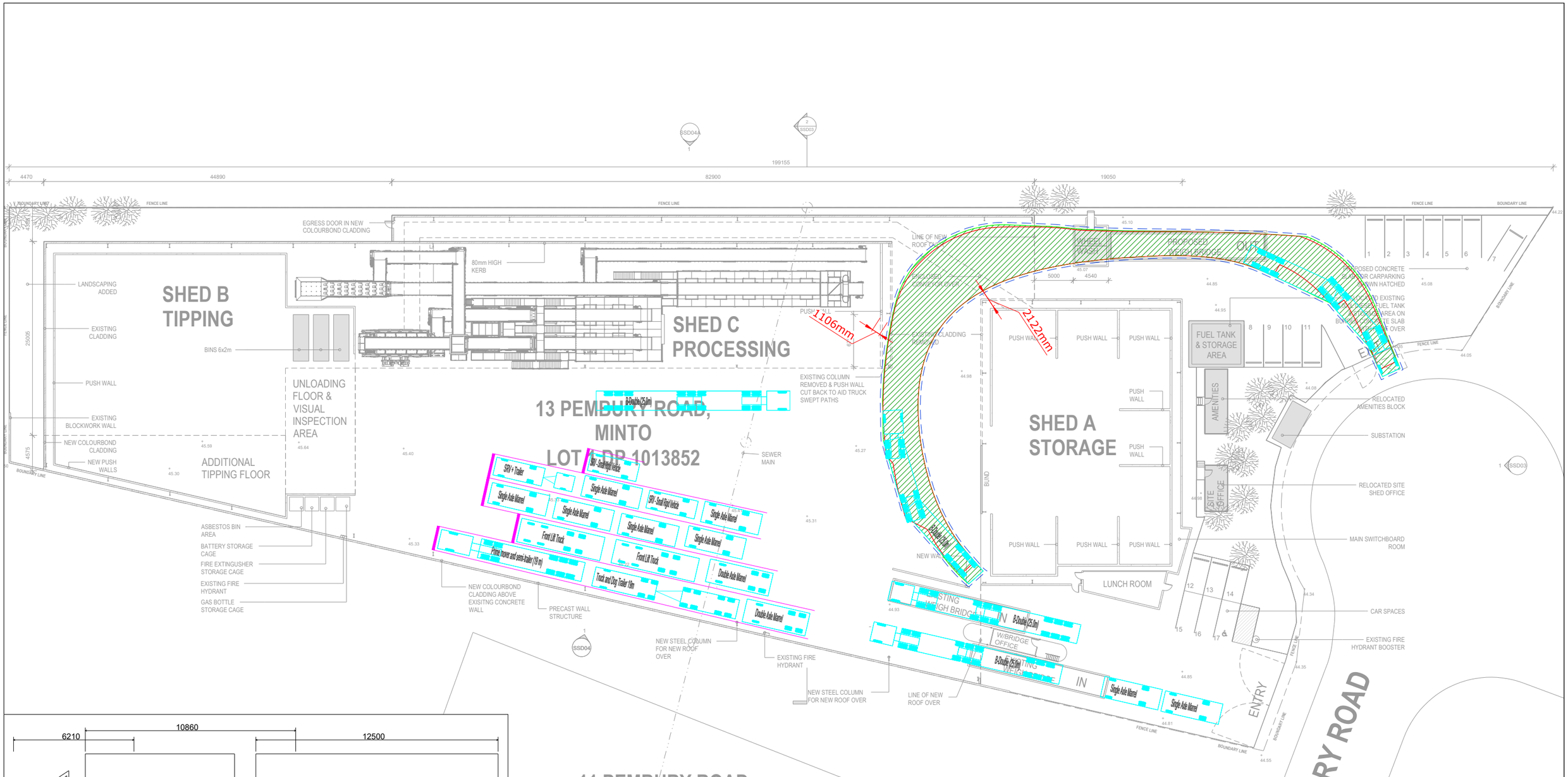
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (2)
INBOUND MOVEMENT

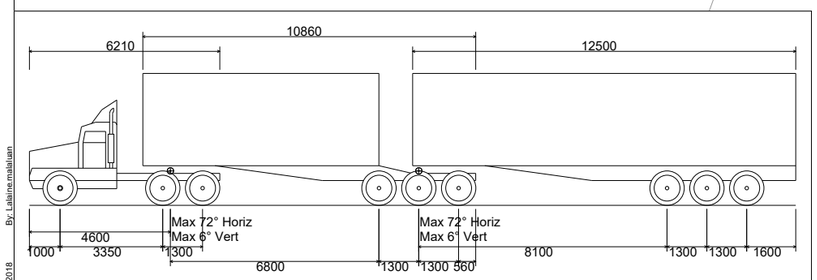
DWG No. FIGURE 3

DATE STAMP 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.malaluan





B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

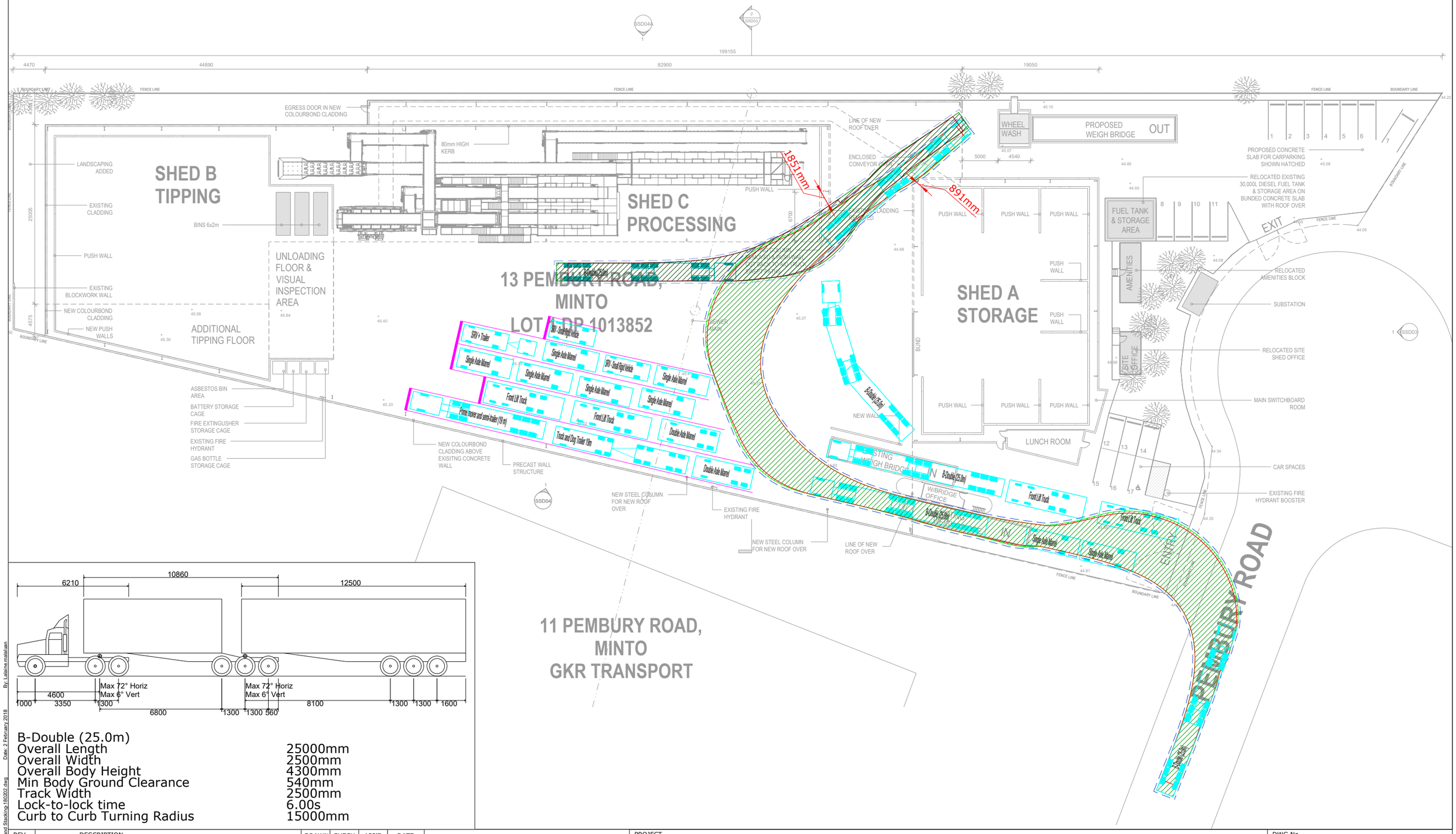
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (2)
OUTBOUND MOVEMENT

DWG No. FIGURE 4

DATE STAMP 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.maliuan



B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

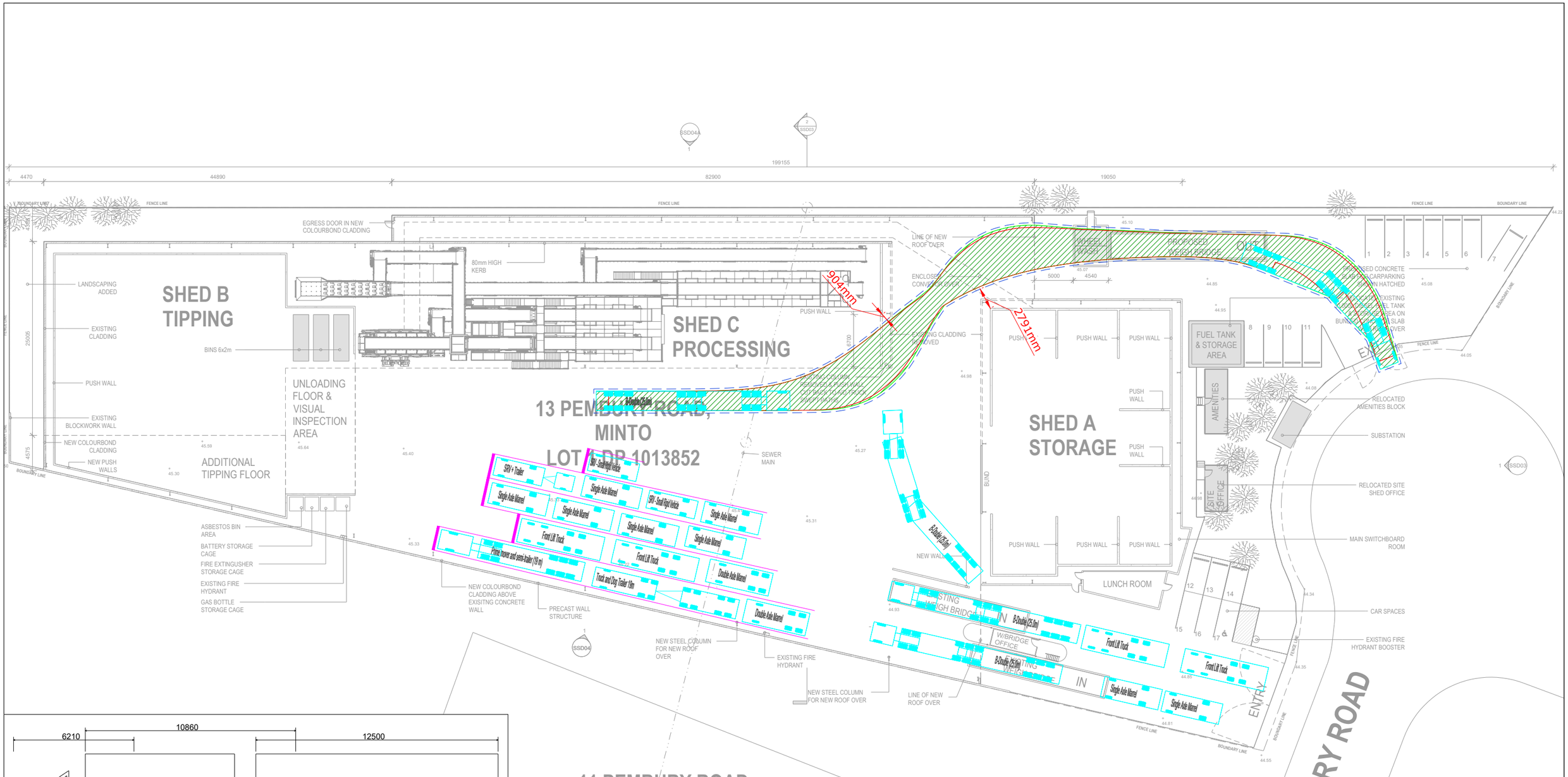
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (1)
INBOUND MOVEMENT

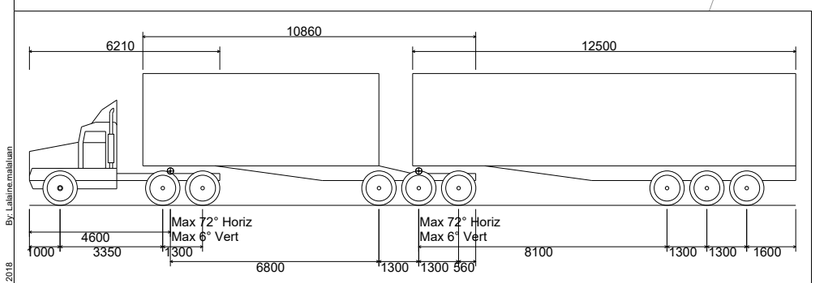
DWG No. FIGURE 5

DATE STAMP 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.maliuan





B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

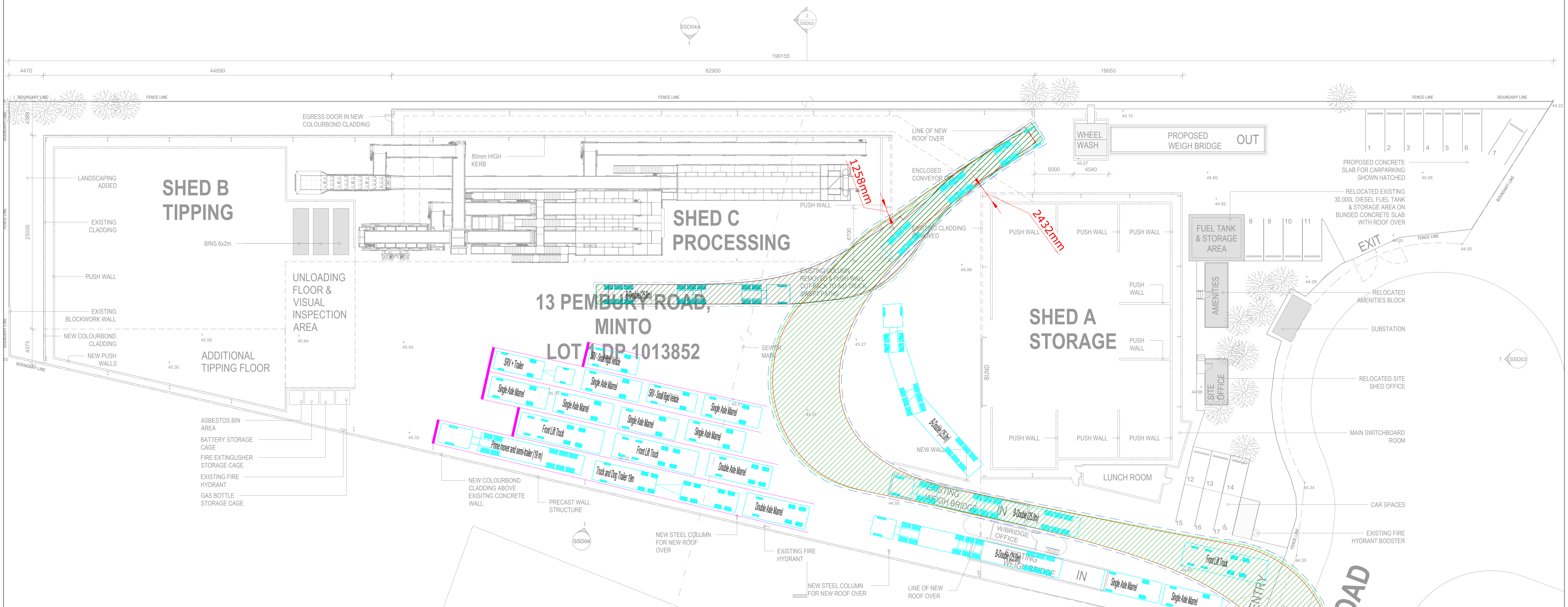
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (1)
OUTBOUND MOVEMENT

DWG No. FIGURE 6

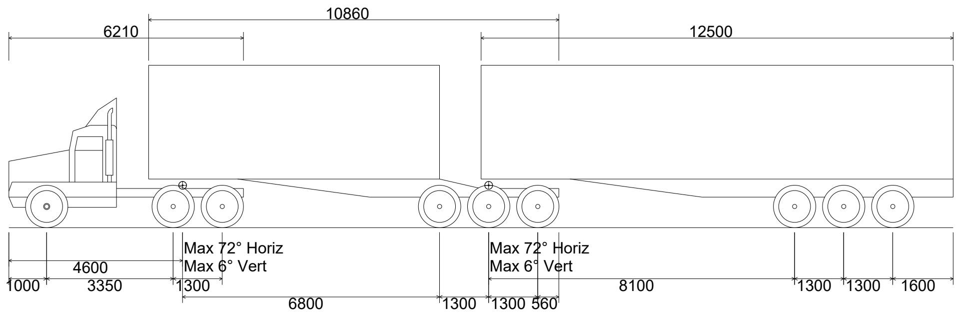
DATE STAMP 02 FEBRUARY 2018

PROJECT No. 15016 | SCALE 1:500 @A3 | REV. A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.malaluan



SHED B
TIPPING
SHED C
PROCESSING
SHED A
STORAGE
UNLOADING FLOOR & VISUAL INSPECTION AREA
ADDITIONAL TIPPING FLOOR
13 PEMBURY ROAD, MINTO
LOT 1, DP 1013852
11 PEMBURY ROAD, MINTO
GKR TRANSPORT
PEMBURY ROAD
1258mm
2432mm
WHEEL WASH
PROPOSED WEIGH BRIDGE
OUT
EXIT
ENTRY
IN
FUEL TANK & STORAGE AREA
AMENITIES
SITE OFFICE
LUNCH ROOM
W/BRIDGE OFFICE
EXISTING WEIGH BRIDGE
PUSH WALL
BINS 6x2m
LANDSCAPING ADDED
EXISTING CLADDING
EXISTING BLOCKWORK WALL
NEW COLOURBOND CLADDING
NEW PUSH WALLS
ASBESTOS BIN AREA
BATTERY STORAGE CAGE
FIRE EXTINGUISHER STORAGE CAGE
EXISTING FIRE HYDRANT
GAS BOTTLE STORAGE CAGE
EGRESS DOOR IN NEW COLOURBOND CLADDING
80mm HIGH KERB
LINE OF NEW ROOF OVER
ENCLOSED CONVEYOR
PROPOSED CONCRETE SLAB FOR CARPARKING SHOWN HATCHED
RELOCATED EXISTING 30,000L DIESEL FUEL TANK & STORAGE AREA ON BUNDED CONCRETE SLAB WITH ROOF OVER
RELOCATED AMENITIES BLOCK
SUBSTATION
RELOCATED SITE SHED OFFICE
MAIN SWITCHBOARD ROOM
CAR SPACES
EXISTING FIRE HYDRANT BOOSTER
NEW COLOURBOND CLADDING ABOVE EXISITNG CONCRETE WALL
PRECAST WALL STRUCTURE
NEW STEEL COLUMN FOR NEW ROOF OVER
EXISTING FIRE HYDRANT
BOUNDARY LINE
FENCE LINE
199155
4470
44890
82900
19050



B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

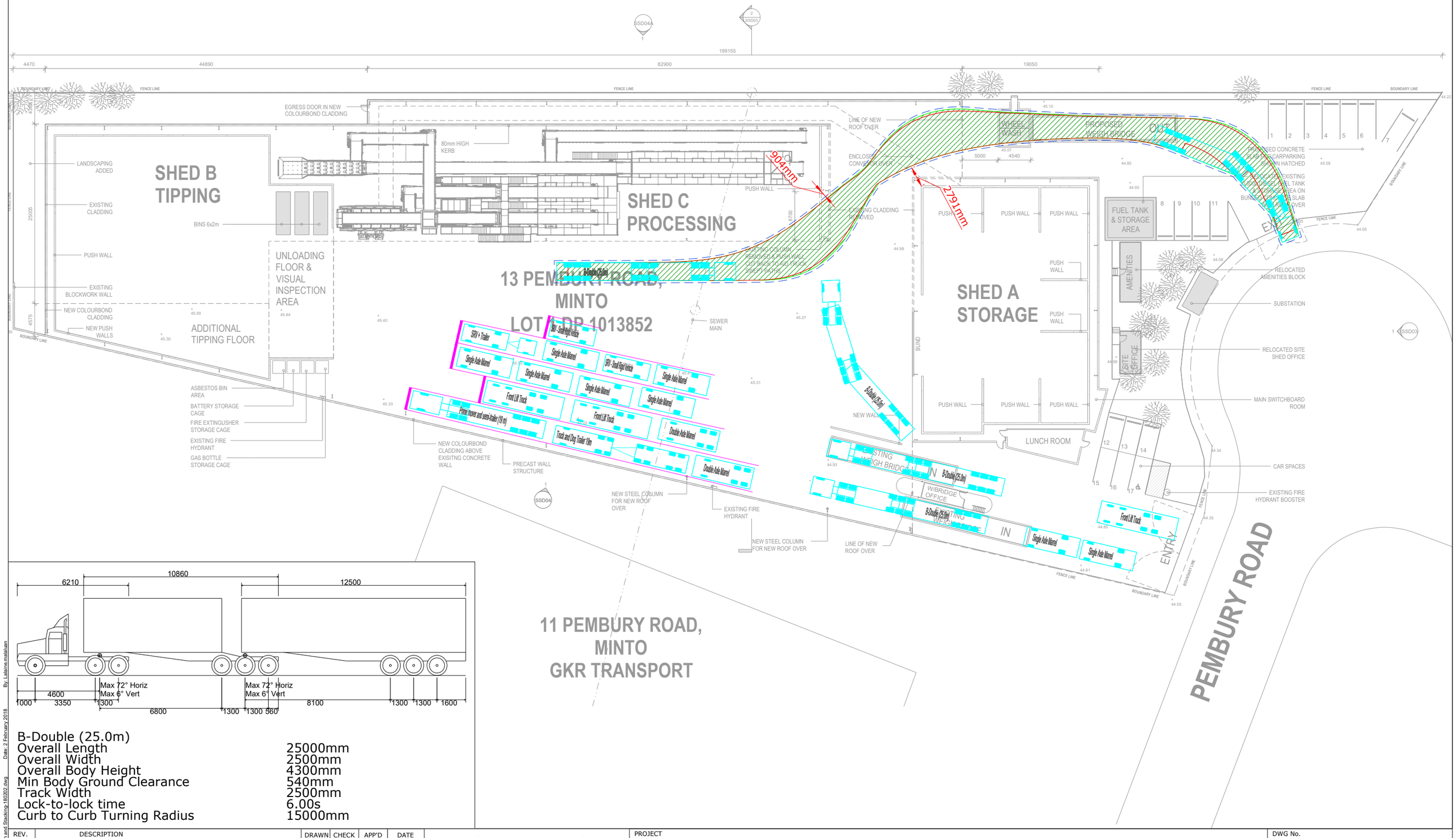
TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (2)
INBOUND MOVEMENT

DWG No.: FIGURE 7

DATE STAMP: 02 FEBRUARY 2018

PROJECT No.: 15016 | SCALE: 1:500 @A3 | REV.: A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine malaluan



13 PEMBURY ROAD,
MINTO
LOT 1 DP 1013852

11 PEMBURY ROAD,
MINTO
GKR TRANSPORT

PEMBURY ROAD

B-Double (25.0m)

Overall Length	25000mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	540mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	15000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	LM	SB	WJ	02/02/18

The Transport Planning Partnership
Suite 402, 22 Atchison Street
St. Leonards NSW 2065
Tel: 02 8437 7800
Email: info@ttpp.net.au

PROJECT: 13 PEMBURY ROAD, MINTO

TITLE: WASTE COLLECTION
25m B-DOUBLE SWEPT PATH VIA INBOUND WEIGHBRIDGE (2)
OUTBOUND MOVEMENT

DWG No. FIGURE 8

DATE STAMP 02 FEBRUARY 2018

PROJECT No.	SCALE	REV.
15016	1:500 @A3	A

Filename: 15016CAD19-Swept Path and Stacking-180202.dwg Date: 2 February 2018 By: Lalaine.maliuan