Waste Management Plan Brooklyn Data Centre, Brooklyn, Victoria

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Stockland

Brooklyn Data Centre
20 May 2026

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Contents

Appendices

1. Introduction

1.1 Purpose

This Waste Management Plan (WMP) has been developed on behalf of *Stockland Development Pty Ltd,* to ensure compliant, safe and sustainable waste management practices are implemented during the operation of the Brooklyn Data Centre (**the Project**), located at 413 Francis Street, Brooklyn, Victoria (**the Site**). The key objectives of the WMP include:

- Ensuring operational compliance with relevant waste management legislation, policies, and guidance
- Identifying waste types, quantities, and streams, and establishing clear systems for the segregation and management of e-waste, general waste, recyclables, and organics (as required)
- Ensuring the safe, compliant storage, transportation, and disposal of all waste streams
- Establishing a framework that defines key roles and responsibilities and promotes minimisation of landfill through application of the waste hierarchy (Reduce–Reuse–Recycle).

1.2 Facility Description

This report has been prepared by Jacobs on behalf of *Stockland Development Pty Ltd* in support of the planning permit application relating to the land at 413 Francis St Brooklyn (**the Site**). This application seeks approval for the Stage 1 portion of the land use and development (shown in image below) for a data centre (**the Project**) as shown in Figure 1.

The Project seeks the staged use and development of two, two-storey data centre (250MVA ultimate power capacity) pursuant to the Industrial 1 & 3 Zones. To facilitate these works, the existing warehouse buildings and associated hard stand/car parking area are to be removed. Early works approval will be sought to undertake bulk earthworks across the Site, including the preparation of leveling of the Site to allow AusNet to deliver the substation (utility installation). It is noted that substation area will be subject to separate planning approvals and the use and development associated with the substation will be subject to a separate approval prepared by AusNet.

This application meets the relevant eligibility criteria to be considered under the Development Facilitation Program where the Minister for Planning will be the Responsible Authority pursuant to Clause 53.22 of the Planning Scheme.

In particular, the Project seeks permission for the staged delivery of two, two-storey data centre buildings, generally comprising the following buildings and works:

- Bulk earthworks for site preparation and leveling (early works approval sought);
- Construction of two-storey data centre buildings with a building height of 18.3 metres, with an additional 7.2 metres of building services for plant and chiller equipment (combined maximum height of circa 25.5 metres);
- The buildings comprise a total gross floor area of circa 75,000 square metres across the two storey data halls and ancillary offices, with additional associated major plant open structures (housing generators and chillers);
- Vehicle ingress and egress is proposed centrally along the Site's frontage to Francis St, with circa 110 car parking spaces provided at the frontage of the two data centre buildings;
- Removal of some vegetation to accommodate the functional parameters of the proposed data centre and substation development;

- Additional landscaping provided in the front setback of the building, scattered throughout the Site and to the office entry of each building, providing an improved landscape response; and
- Provision of required utilities, including diesel generator back up power system, associated fuel storage systems, fire pump and associated water tanks.

The proposed data centre seeks to provide much needed AI integration, data, content and cloud services to address the emerging demand for cloud computing services.

The Project's design has been shaped by technical assessments and stakeholder feedback, ensuring a balanced approach to development. The Project seeks to provide a strategic response to the existing and emerging character through provision of an improved built form and landscape response.

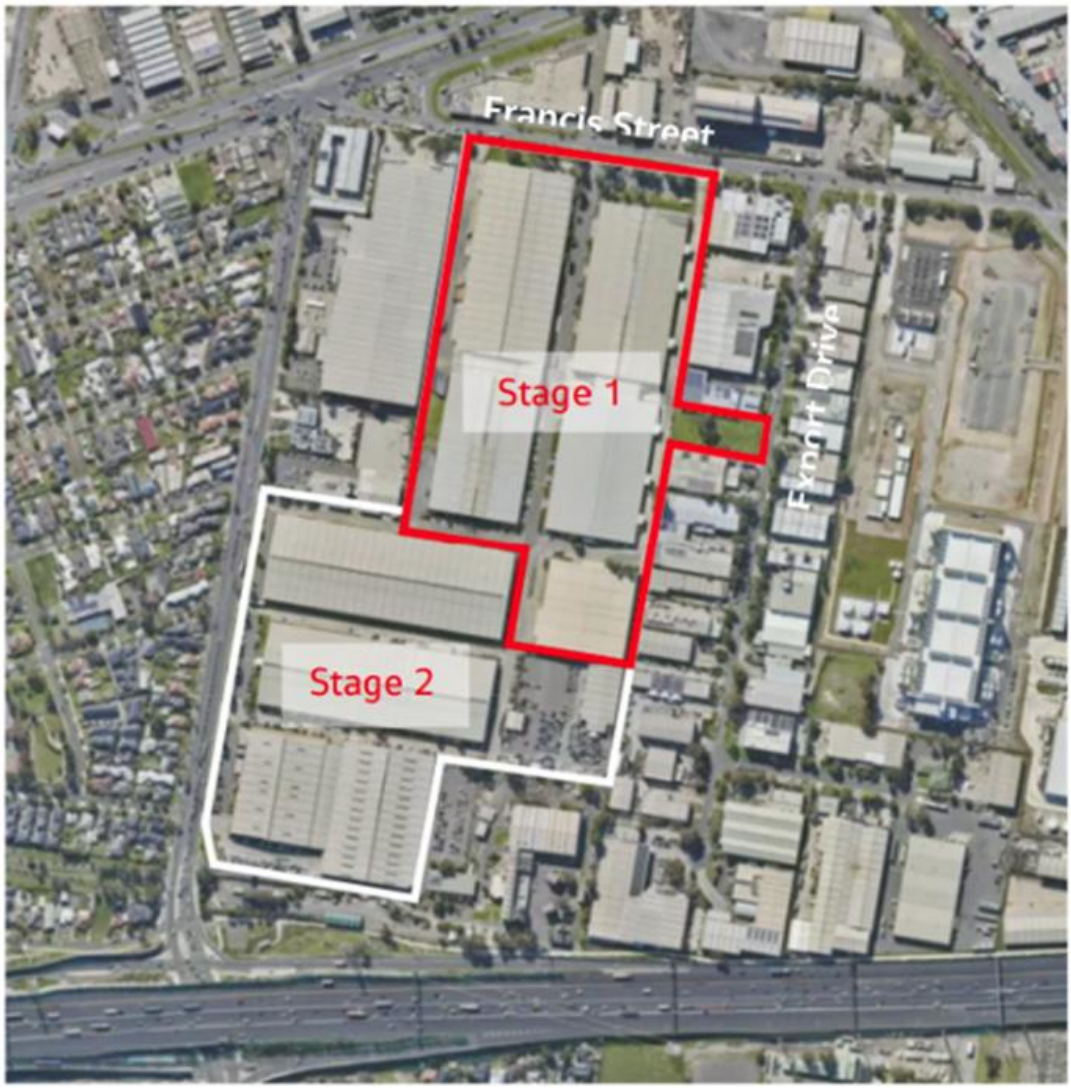

Figure 1 Brooklyn Data Centre Location

2. Relevant legislation, policy and guidance

2.1 Overview

This section sets out the mandatory requirements and procedures for managing waste generated by the Project and details associated roles and responsibilities.

2.2 Institutional framework

This WMP has been prepared in alignment with relevant international, national and state legislation, policies and best-practice guidance. It reflects the requirements of the *Environment Protection Act 2017*, Environment Protection Regulations 2021, *Circular Economy (Waste Reduction and Recycling) Act 2021, Recycling and Waste Reduction Act 2020*, and the National Waste Policy Action Plan (2019, updated 2024), and is informed by applicable sector frameworks such as NABERS Waste for Data Centres.

Regulated wastes and consumables must be handled in accordance with relevant environmental and safety requirements. The WMP incorporates recognised technical standards including Australian Standard (AS) 5377:2022 for e-waste management, Responsible Recycling (R2) and e-Stewards IT asset disposition (ITAD) standards, and US National Institute of Standards and Technology (NIST) 800-88 for media sanitisation. It is further guided by EPA Victoria's waste and e-waste obligations, battery-storage requirements, and industrial-waste handling guidelines.

Waste will be classified, transported and disposed in accordance with EPA requirements, including the reporting of waste through the EPA Portal[1] and use of the EPA Waste Tracker, which is an electronic compliance tool that is utilised to track reportable priority waste (hazardous waste that needs to be moved from one location to another). In addition, the WMP aligns with local planning expectations through Hobsons Bay City Council's Sustainable Design Assessment in the Planning Process (SDAPP) – Waste Management requirements, together with relevant Melbourne-specific waste and resource-recovery guidance.

A full list of documentation that informed the development of the WMP is included in Appendix A.

2.3 Roles and responsibilities

The Project Operator is responsible for managing waste in accordance with this WMP and for developing, implementing and maintaining the safe operating procedures required to support it. All Project staff, including facilities management team and appointed waste contractors, must comply with the requirements of the WMP as part of their daily duties. A designated Waste and Resource Recovery Lead, appointed by the Project Operator or facilities management team lead, will be accountable for overall WMP performance, regulatory compliance and the coordination of waste-service contractors.

To fulfil these responsibilities, the Waste and Resource Recovery Lead will:

- Ensure that Project staff and contractors receive induction and refresher training on the WMP, including safe handling, segregation requirements, and site-specific procedures
- Maintain clear signage, colour-coding, and waste-stream labelling across the Project in line with contractor specifications and regulatory requirements
- Keep accurate records for relevant waste streams, including storage locations, contractor details, collection data, and compliance documentation and
- Monitor the ongoing performance of the WMP, including waste volumes, diversion outcomes, and issues requiring corrective action.

[1] The EPA Portal provides a location to manage online applications and records relating to waste management. Located at: Home · EPA Interaction Portal

3. Waste generation

3.1 Overview

This section of the WMP provides estimates of waste generation and identifies and classifies the primary operational waste streams.

3.2 Methodology

Waste-generation estimates for the WMP have been prepared and classified in accordance with EPA Victoria's Waste Framework. As Hobsons Bay City Council does not publish commercial waste-generation rates, the City of Melbourne's Waste Generation Rates (June 2021) have been adopted to calculate estimated waste volumes, consistent with industry practice across Victoria.

3.3 Waste stream classification and associated management

The main operational waste streams generated by the Project are discussed in Table 1 and classified in accordance with EPA Victoria's waste framework, which distinguishes industrial waste (IW), priority waste (PW), and reportable priority waste (RPW) under the Environment Protection Regulations 2021.

Table 1. Waste stream classification and description

Waste Stream	EPA Classification	Description
Garbage	IW	Garbage (General Waste) shall be placed in tied plastic bags and stored within the designated waste bins for collection. This stream includes non-recyclable office and amenity waste that does not meet criteria for priority or reportable priority wastes.
Recycling	IW (Z100 glass, Z300 steel, Z400 cardboard, Z430 paper, Z500 plastics)	Bins will be provided for commingled recyclables (paper, cardboard, metals, plastics and glass). These materials fall under the Z-series industrial waste codes with no priority/reportable priority status. A dedicated area for cardboard and pallets may also be maintained as well as additional containers for source separation i.e. for glass when further separation is appropriate.
Organics	IW (K210)	There are anticipated to be low amounts of organic waste generated, based on the low number of staff on site and limited associated food preparation. Users shall deposit organic waste into clearly marked organics bins. These organics bins will be lined with appropriate compostable liners in line with AS5810-2010 (home composting standard) or AS4736-2006 (industrial composting), subject to collector acceptance. Any green waste from landscaping shall be removed by the landscape maintenance contractor.
Office waste	IW (Z430 paper, Z500 plastics)	Confidential documents shall be placed in secure-shredding consoles for collection by an approved provider. Soft plastics shall be collected separately only where a recycling service exists; otherwise, they will be disposed of as general waste (IW). Packaging such as polystyrene or composite materials shall be sorted according to contractor acceptance.
E-waste	PW- T300	E-waste shall be managed as a major operational waste stream and is classified by EPA Victoria as T300 – Priority Waste (PW), meaning it must be handled, stored, and transferred in a manner that prevents damage, enables resource recovery, and avoids landfill disposal. Specifically, landfills are not lawful places for disposal of e-waste in Victoria.

		Electronic equipment, including servers, switches, cabling, racks, and data media, requiring secure destruction, shall be stored indoors in dedicated cages (Section 4), kept dry, and protected from physical damage until collected by an authorised e-waste processor (Section 5). E-waste often contains embedded batteries, which are also regulated as PW and may trigger Dangerous Goods requirements. This requires appropriate segregation, fire-risk controls, and availability of a Safety Data Sheet[2]. Data-bearing devices shall remain secured in locked containers until processed by a certified secure-destruction contractor. No e-waste is to be disposed of to landfill.
Other waste	T300 PW M160 J100, J120, J130, J170 D120 K310 NH	Other regulated waste streams, including batteries, refrigerants, oils, fluorescent lamps, chemicals, polystyrene and potentially hazardous waste, shall be stored safely onsite until an appropriate private collection is arranged in accordance with EPA Victoria requirements. Batteries such as UPS blocks, lithium-ion cells and small portable cells are classified as T300 PW and must be segregated by battery type, stored in non-conductive containers, and handled using guidance from SDSs. Some battery types (e.g. lithium-ion batteries) may also be considered Dangerous Goods for transport, particularly when in bulk. Dangerous Goods require caution when handling and packing, and a relevant SDS must be available. Refrigerants (M160) and oils, oil and water mixtures, interceptor wastes and oil filters (J100, J120, J130, J170) are PW and Reportable Priority Waste, requiring the use of the Vic EPA Waste Tracker[3] for offsite movements and transport only by EPA-permitted carriers. These materials must be stored in bunded, leak-proof areas with SDS available. Fluorescent lamps containing mercury (D120) are also PW and RPW, requiring intact storage, breakage controls, SDS availability and Waste Tracker compliance. Untreated wooden pallets and timber packaging (K310 NH) are IW and may be reused or recycled. PW and RPW streams require documented EPA waste classification, SDS access, appropriate handling controls and confirmation that receiving facilities are lawful places. Potentially contaminated soil and spent spill kit materials arising from fuel spills on site will need to be managed and disposed of appropriately. In the case of contaminated soil, prior to removal from site, it must be tested and classified before being transported to a suitably qualified (and lawful) facility i.e., if affected soil is determined to be category C waste in accordance with the guidance in EPA Publication1828.3 Waste disposal categories – characteristics and thresholds, it must go to a waste facility licenced to accept and dispose of this waste category. After use, the contents of the spill kit and absorbed material (i.e. fuel) will be placed into the included (in kit) chemical resistant bags, sealed and labelled. The Project Operator is responsible for engaging a suitably qualified contractor to remove and manage waste considered to be hazardous.

3.4 Waste generation estimate

The Project comprises two (2) two-storey buildings, each containing office areas in addition to the data centre halls. Waste-generation calculations have been undertaken based on the active office area within each building (approximately 2,837 m^2 per building), with the data centre floor area excluded from quantitative estimates. This approach reflects the low staffing density within data halls and the fact that data centre

[2] A Safety Data Sheet is a standardised document that provides detailed information about a hazardous substance.

[3] The Victorian EPA has an online system 'the Waste Tracker' that tracks reportable priority waste in Victoria.

operations generate limited routine waste, instead producing occasional waste streams dominated by e-waste and specialist materials, which are managed and removed on an as-needed basis by licensed specialist contractors. Table 2 summarises the estimated waste volumes of general waste.

Table 2. Waste Generation Estimates[4]

Commercial Use	Garbage	Recycling	Organics[5]
Office Waste Generation Rate	10L/100 m^2 floor area/day	10 L/100 m^2 floor area/day	10 L/100 m^2 floor area/day
Total office floor area: approximately 2837 m^2	2837 m^2 /100 x 10 L = 1985.9 Litres/day	2837 m^2 /100 x 10 L = 1985.9 Litres/day	1377 m^2 /100 x 10 L = 137.7 Litres/day
Days of operation per week: 7	283.7 litres x 7 days = 1985.9 L/week	283.7 litres x 7 days = 1985.9 L/week	137.7 litres x 7 days = 963.9 L/week
Total waste generated per week	1985.9L	1985.9L	963.9L

[4] The above calculations are for one (1) office, there are two offices present on site, each will have the same number of bins to manage the estimated waste generation.

[5] The organics disposal rates are based only on the first-floor area as that is the only location of a break room.

Hardware upgrade activities are expected to occur approximately every 3–5 years, during which, e-waste removal will be scaled up accordingly in line with the procedures set out in this WMP. As data-centre equipment refresh cycles are driven by rapidly evolving technology standards, variable operational demands, and staggered asset retirement, it is not possible to accurately estimate the annual e-waste generation rate in advance.

To support resource recovery outcomes, the Project Operator will adopt recycling targets consistent with industry best practice, with the aim of diverting the maximum practicable proportion of e-waste from landfill through certified recycling streams. E-waste generation will be tracked over time using an internal asset-management and procurement register, which records equipment installation dates, replacement cycles, and disposal volumes. This information will be reviewed routinely to identify trends, confirm compliance with recycling targets, and support continuous improvement in e-waste management.

4. On-site waste management, location and system

4.1 Basis of design

The Project's waste management approach includes bin types, waste storage locations and collection processes. The refuse room is designed to ensure that Project staff have convenient access to the waste separation systems, while providing adequate capacity for collection and consolidation at the building level.

- Office-Based Bins: Small office-based bins (approximately 20 L) for general waste, recycling and organics will be distributed throughout work areas. These will allow Project staff to easily separate waste at their desks or within office zones.
- Common-Area Bins: Larger 50 - 80L bins for garbage, recycling and organics will be located within shared areas and kitchen/stationery rooms on each floor. Additional collection points for batteries and e-waste will be provided in the stationery rooms, ensuring safe and convenient management of specialty waste streams.
- Large Bins: Large bins and cages are provided in the refuse rooms, situated on the ground floor of each office building next to the external loading bay as outlined in red in Figure 1. These serve as final collection points for accumulated waste. Each refuse room has a floor area of is approximately 32 m^2 and is designed to accommodate:
  - Area for sorting waste
  - 2 X 660L bins
  - 1 X 240L bin (and 1 X additional 240L for glass (optional))
  - A lockable 6 m^3 storage cage for e-waste
  - Cage for cardboard
  - Space for batteries, spent LED/fluorescent light bulbs and other priority waste streams
  - Wall space for educational signage.

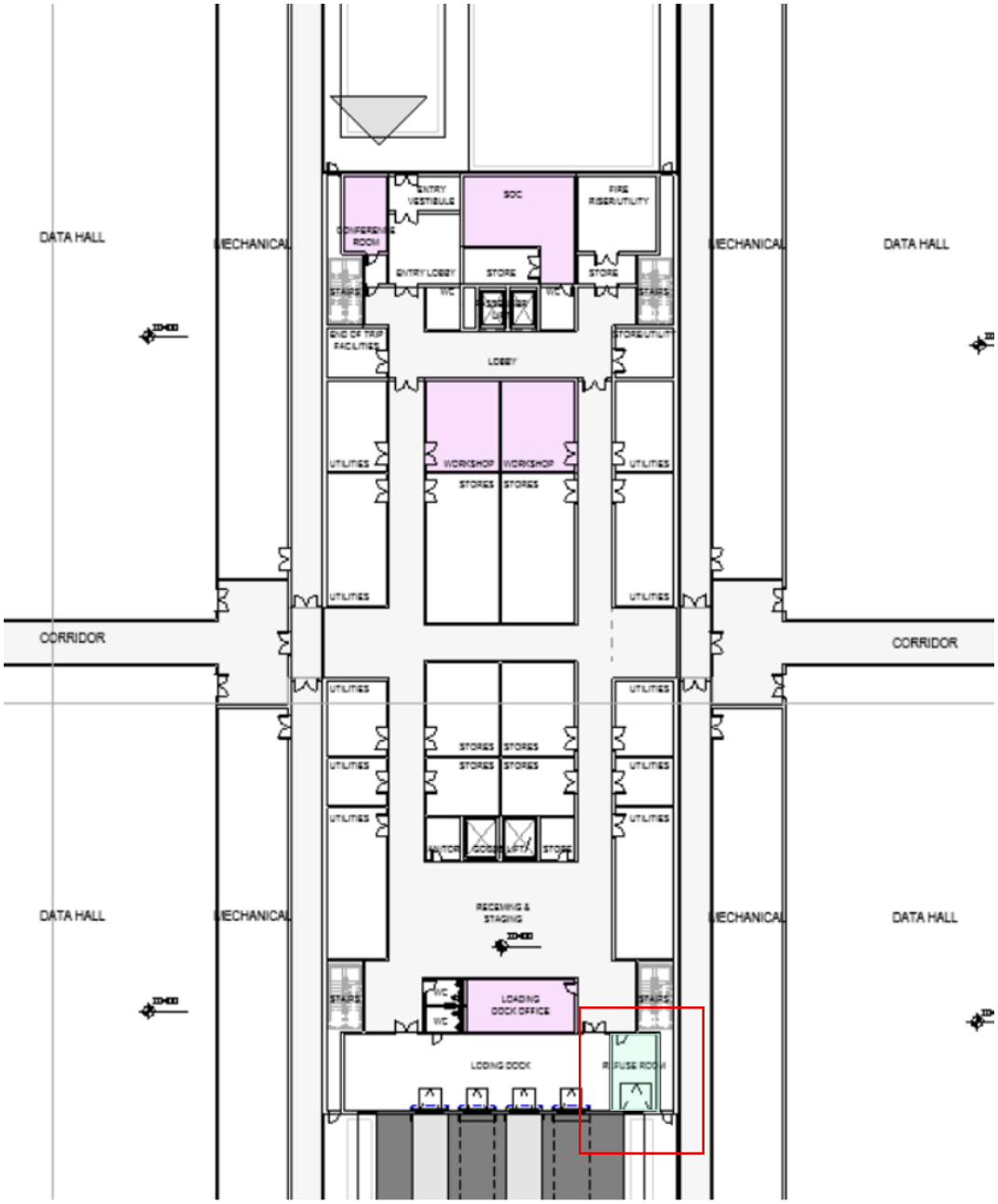

Figure 1. Refuse room location (ground floor)

4.2 Bin and storage information

Table 3 sets out the bin colours, size, quantities and collection frequencies for office waste. Consistent colour coding will be used throughout the Project to align with Hobsons Bay's waste separation standards.

E-waste will be collected and removed from the premises at least monthly, by a certified recipient. This waste will be managed by the Waste and Resource Recovery Lead, and they are responsible for arranging suitable treatment and/or disposal.

Table 3. Refuse room bin colour, size, quantity and collection frequency

Waste Stream	Bin Colour	Bin/ storage Size	Number of bins	Collection Frequency
General Waste	Red	660L	1	3x per week
Recyclables	Yellow	660L	1	3x per week
Organics	Green	240L	1	2x per week
Glass	Purple	240L	1	Optional
E-waste	Metal cage	6 m^3	1	At least monthly
Batteries and Bulbs	White	50L	1	On call as required

Note: these bin requirements relate to each refuse room.

4.2.1 Bin Dimensions

Table 4 provides the estimated dimensions of the proposed bins.

Table 4. Estimated dimensions of proposed bins

Capacity (litres)	Height (mm)	Width (mm)	Depth (mm)	Waste Stream
50	610	390	290	Batteries and Bulbs
240	1060	585	730	Organics
660	1200	1400	800	General waste, recycling

4.2.2 Other waste

There is an opportunity to improve the management of other data centre waste streams by sorting waste and re-using or recycling materials where appropriate, as shown in Table 5. The recommended storage areas will need to be considered within the final design.

Table 5. Data centre waste streams

Stream	Container type	Indicative size	Storage requirements	Collection / disposition
Cardboard	Baler or dedicated cage/skip	Baler footprint or 3–6 m^3 cage/skip	Keep dry; prevent contamination	As needed
Soft plastics/film	Bag stand/cage	1–3 m^3	Keep dry; segregate clean film	As needed to recycler
Timber pallets/crates	Pallet bay/cage	2–4 pallet positions	Secure; maintain fire clearance	Return/reuse or recycle as needed

Stream	Container type	Indicative size	Storage requirements	Collection / disposition
Scrap metal/copper offcuts	Metal stillage/skip	1–3 m^3	Separate copper where possible	As needed to metal recycler
Lamps/tubes	Lamp coffin/box	Standard tube container	Protect from breakage	As needed to approved recycler
Filters/absorbents	Bunded drum	120–240 L	Bunded; labelled; closed	As needed to licensed contractor
Waste oils/coolants /contaminated waste/ contaminated spill response materials	Bunded drum/IBC	200 L drum or 1,000 L IBC	Bunded; spill kit bin; labelled, closed	As needed to licensed contractor

4.2.3 E-waste

E-waste must be transferred to the secure, access-controlled cages within the refuse room and will be kept separate from non-data-bearing equipment to maintain a clear chain of custody. Project staff must record the movement of each item in an internal waste register, including the relevant waste classification, its storage location and its transfer to a contractor. Before data-bearing devices leave the Project, it must undergo sanitisation or destruction in accordance with NIST 800-88 or equivalent standards, ensuring sensitive information is fully eliminated.

Management of e-waste must be in line with the EPA Victoria requirements for lawful storage, AS 5377:2022 e-waste processing standards, ITAD/data-sanitisation standards (NIST 800-88, R2v3, e-Stewards), and relevant battery transport and safety regulations (State requirements and the Australian Dangerous Goods (ADG) Code).

Batteries require additional controls. Each battery must be segregated by type and stored in dedicated fire-resistant containers designed for the specific risk profile of these materials. Storage, internal transfers and offsite transport must comply with State regulations and the packaging, labelling and handling requirements of the Australian Dangerous Goods (ADG) Code. Staff will be trained in recognition and management of battery hazards, including thermal-runaway risks, and must isolate any damaged, defective or recalled (DDR) battery immediately in a designated non-combustible containment vessel.

All e-waste and batteries must be collected only by licensed ITAD and specialist contractors. No e-waste may be placed into general waste or recycling storage, stored outdoors, mixed with incompatible materials, or removed from the site without authorisation and proper documentation.

Victoria's e-waste must not go to landfill and must be handled by a '*lawful place*' as defined by EPA Victoria (see Section 6).

4.2.4 Other wastes and consumables

Refrigerants and cooling-system fluids are to be managed exclusively by licensed technicians using approved recovery pathways, including compliance with obligations relating to synthetic greenhouse gases and refrigerant stewardship. These materials must never be vented or released and should be transferred only to authorised service providers for recovery or disposal.

Waste oils, coolants, contaminated absorbents and filters must be stored in bunded, clearly labelled containers that are kept under cover to prevent spills and weather exposure. These materials are to be removed from site by licensed contractors with appropriate documentation. Lamps and fluorescent tubes must be placed in approved collection containers designed to prevent breakage and mercury release, ensuring safe handling and compliant recycling through authorised facilities.

Reportable priority wastes removed from site must be logged using the Vic EPA Waste Tracker.

5. Waste collection

5.1 Overview

This section details the waste contractor requirements, site circulation and access for safe waste collection, swept path analysis and demonstrated safety in design for waste management at the Project.

5.2 Waste Contractors

Based on the estimated waste volumes outlined in Section 3, waste contractors will be required to collect and dispose of wastes generated by Project operations. Waste contractors will be authorised to receive industrial waste in accordance with EPA requirements, hold necessary permissions or exemptions and comply with duties of persons receiving industrial waste as set out in Section 134 of the *Environment Protection Act 2017*.

Contracts with waste contractors will ensure:

- Appropriate compliance clauses in accordance with Section 2 of this WMP
- Certification to AS 5377 for e-waste, including secure data sanitisation and chain-of-custody arrangements
- Completion of required documentation when receiving and delivering waste and
- Maintenance of a documented chain of custody for regulated waste streams.

5.3 Site circulation and access for waste collection

Site circulation pertaining to waste collection and loading bays are shown in Figure 2. Waste collection vehicles will enter the site via the Francis Street driveway.

Collection points will be made available for garbage and recycling waste streams in the shared areas and kitchen/stationery rooms on each floor, which will then be collected and consolidated in the refuse room into the larger 240L and 660L bins.

For the collection schedule, the waste contractor will remove the anticipated volumes of wastes as laid out in Table 2. All waste streams will be collected directly from the loading bays, located adjacent to the refuse room. Handover of site bins to the contractor will be coordinated and facilitated by operator staff and/or a designated operator on their behalf.

5.4 Swept path analysis

The swept path analysis has been undertaken as a part of a traffic management assessment (Jacobs, 2025) which identifies the routes and mobilities of the site for heavy vehicles to access the loading bays. Part of this analysis assessed trucks up to 19 m, which found that a vehicle of this size would be able to manoeuvre around the site and to access the two loading bays (one at each office building). Given that rear-lift garbage trucks (assumed vehicles for waste collection) are generally about 8.8 m long, there is sufficient access for waste disposal.

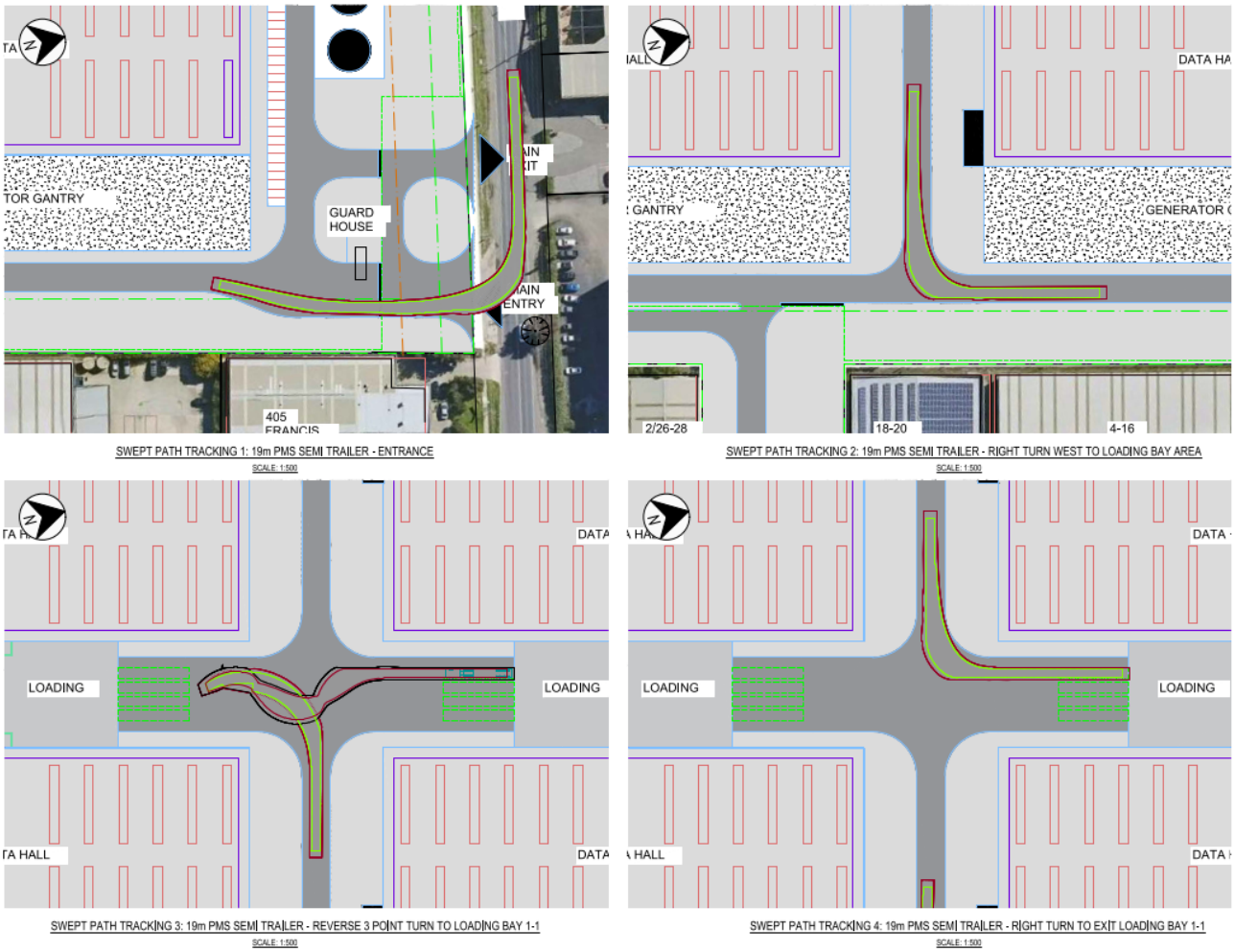

Figure 2. Site circulation and swept path analysis for waste collection

5.5 Safety in design

Site circulation has been designed to minimise interactions between people, waste-handling activities and vehicle or plant movements associated with waste collection. Drawing on Safety-in-Design and Restricted Access Zone (RAZ) principles, pedestrian routes and operational pathways will be clearly separated, with designated walkways, line-marking and signage used to maintain safe movement throughout the Project.

Access into functional areas used for waste sorting, loading or collection is restricted to facilities management, and these areas are arranged to prevent unnecessary crossover between Project staff, contractors and equipment. Where waste vehicles or material-handling equipment are required to enter the site, movements are controlled through pre-defined access points, with reversing movements minimised, visibility maintained and controls such as mirrors, warning signage, speed limits and physical barriers applied where appropriate.

Safe zones and exclusion areas will be clearly identified to prevent interactions between people and moving plants, with any RAZs managed in accordance with the site's traffic and access controls. Security cameras (CCTV) will be installed around the Project, with external visibility of loading bays available in the event of any safety events on-site. Access will be managed via fencing and an access gate, with only facility related vehicles anticipated on site. Further safety information pertaining to security can be found in Section 7.6. Scheduling of waste collections and maintenance tasks will also be coordinated to limit concurrent activities in shared spaces, reducing the likelihood of congestion or conflict points.

Collectively, these measures ensure that waste-related movements occur in a controlled, well-defined manner, consistent with best-practice Safety-in-Design principles and the requirements identified in the Project access-control assessments.

6. Waste disposal facilities

6.1 Overview

In accordance with the *Environment Protection Act 2017*, industrial waste must be deposited at a place lawfully authorised to receive that waste (lawful place). This place may also be authorised to conduct activities, such as resource recovery or landfill disposal. The *Environment Protection Act 2017* and Environment Protection Regulations 2021 set out when a person, place or premises is authorised to receive industrial waste. A site is a lawful place if it meets one of the five EPA recognised conditions: holding a licence/permit/registration, an exemption, meeting Regulation 63 conditions, an EPA determination, or a declaration of use.

Victoria does not publish a simple fixed list of "lawful places" and instead, the Waste and Resource Recovery Lead will need to check each site's permission on the public register. Known sites can be verified using the EPA Public Register and Victoria's waste and resource recovery infrastructure map. Table 6 and Table 7 set out a list of major licensed Victorian facilities that accept industrial waste, e-waste, batteries, and general commercial waste (typical data centre waste streams).

Table 6. Examples of relevant licensed facilities for general waste streams

Facility Name	Accepted Waste	Location
Cleanaway Brooklyn Resource Recovery Centre	General waste, C&I, organics	Brooklyn
Cleanaway Melbourne Regional Landfill	General waste, C&I, organics	Ravenhall
BINGO Industries - Dynon Road Waste Recycling Centre	C&D, C&I, organics, general waste, commingled recycling, cardboard	West Melbourne

Note: C&D = construction and demolition waste, C&I = commercial and industrial waste.

Table 7. Examples of relevant licensed facilities for specialty waste streams

Facility Name	Stream	Accepted Waste	Location
Cleanaway Brooklyn Resource Recovery Centre	E-waste	Not specified online	Brooklyn
Envirostream Australia	Batteries	Li-ion, alkaline, nickel metal hydride, lead acid, nickel cadmium	Laverton North
SK Tes	E-waste & batteries	Data centre hardware, secure data destruction, ITAD	Somerton
Ecoactiv	E-waste	Servers, racks, switches, cabling	Various, collection options
TechCollect	E-waste	Information and communications technology (ICT) + server recycling under NTCRS	Various, collection options
Scipher Technologies	E-waste	High grade ICT and PCB materials	Dandenong

7. Sustainability, safety and environmental

7.1 Overview

Sustainable waste management for the Project emphasises avoiding waste in the first instance, reducing waste at the source, extending the life of materials and equipment, and maximising recovery through recycling. This approach aligns with the operational principles of reduce, re-use and recycle, which guide procurement decisions, daily practice and contractor engagement. By incorporating sustainable waste management into the design and management systems of the data centre waste, waste will be managed in accordance with environmentally sustainable design (ESD).

7.2 Procurement and waste avoidance

Waste avoidance will begin with operational procurement. The Waste and Resource Recovery Lead will preferentially select suppliers that provide vendor take-back programs for servers, networking equipment, batteries and transport packaging, where practicable, and will require confirmation of downstream recycling or remarketing outcomes. Deliveries should be specified with minimal or reusable packaging, especially for high-frequency consumables such as filters, components and spare parts.

Where security and performance requirements allow, equipment should be assessed for reuse, repair or refurbishment as part of routine IT asset lifecycle planning to reduce unnecessary disposal. Procurement personnel should also avoid products with excessive or non-recyclable packaging and minimise the introduction of single-use items such as disposable containers, cutlery and crockery into the Project.

7.3 Recycling and operational resource recovery

Recycling will support ongoing diversion of waste from landfill. Correct source separation by Project staff and contractors will be monitored and implemented by the Waste and Resource Recovery Lead. To ensure compliance, clearly labelled disposal points and consistent colour-coding will be maintained throughout the site, supported by staff induction and refresher training.

The Waste and Resource Recovery Lead will coordinate routine recycling of batteries and e-waste through approved contractors to ensure these regulated materials are managed safely and in accordance with relevant standards. Proper handling and separation will reduce contamination of recycling streams and mitigate safety risks, including the risk of fires caused by inappropriate disposal of batteries or electronic components.

7.4 Commitment to best practice

By embedding the principles of waste avoidance, reuse, repair and recycling into daily operations, the Project maintains a best-practice approach to sustainable resource management. These measures support regulatory compliance, improve overall waste performance and ensure that waste generation is minimised throughout the life of the Project.

7.5 Communications and safety

Clear and consistent communication will be maintained with Project staff and contractors to ensure effective implementation of the WMP across data centre operations. Waste management requirements, including waste avoidance, minimisation, reuse, recycling and responsible disposal, will be communicated through site inductions, signage, and documented procedures. Roles and responsibilities relating to waste segregation in accordance with correct bin colours, storage and handling will be clearly defined, with signage and guidance provided in waste storage areas to reinforce correct practices. Ongoing engagement, including periodic refresher training and performance feedback, will be used to promote continual improvement. Waste

contactors will liaise with the Waste and Resource Recovery Lead to access to the relevant waste containers, via the loading bays. Following best practice, there will be footpaths and signage externally, particularly near the loading bays. It is also highly recommended that persons on-site, when walking outside during waste collection times, wear a high-visibility vest. Safe handling and storage of e-waste is discussed in Section 4.2 and covers procedures that will help manage fire risk.

Fire risk controls will be implemented to ensure no damaged batteries are accepted into refuse rooms. Batteries that appear "suspect/damaged" will be isolated in separate containers. A spill kit and a fire extinguisher will be maintained on site in accordance with the site fire strategy.

7.6 Security

Based on the security controls outlined in the Masterplan Report (Jacobs, 2026), access to the site, and subsequent sensitive areas will be managed.

This includes but is not limited to:

- High security fencing
- Access gates
- Perimeter surveillance (CCTV)
- Motion activated lighting.

The implementation of these practices will assist in mobility for authorised personnel (operational staff and relevant contractors) and discourage potential theft or vandalism.

7.7 Environmental considerations

The Project is located on industrial zoned land, over 300 m away from the nearest sensitive receiver. Therefore, odour, noise and visual amenity values are not expected to be negatively impacted by the Project waste management activities. Waste will be stored within the refuse rooms and hidden from external view. Waste collection will occur during manned hours to allow for collection coordinated with the local waste management at the offices on site, and to reduce the likelihood of out of hours noise impacts. The Waste and Resource Recovery Lead is responsible for managing waste on-site and ensuring that it does not leave the Project boundary, limiting potential impacts to surface water bodies in proximity to the Project.

7.8 Construction and commissioning waste

Construction and commissioning wastes (including packaging from initial equipment installation) will be managed under a Construction Environmental Management Plan and Council-required construction environmental management processes. During fit-out and commissioning, the construction contractor will provide dedicated skips/cages for cardboard, plastics, metals and timber to maximise diversion from landfill.

8. Performance monitoring and reporting

8.1 Overview

The Waste and Resource Recovery Lead will implement a structured monitoring and reporting program for the Project to demonstrate compliance with applicable Victorian regulatory requirements, contractual obligations, and internal environmental performance objectives. The program will be designed to address (i) steady-state operational waste streams and (ii) periodic waste "spikes" associated with planned hardware refresh and upgrade activities.

Monitoring and reporting will verify:

- Compliance with the waste hierarchy (avoid → reuse → recycle → recovery → disposal)
- Lawful storage, transport and processing of regulated and high-risk waste streams
- Performance against defined waste-reduction and recycling targets and
- Opportunities to improve resource efficiency, reduce contamination and strengthen governance.

Key performance indicators (KPIs) include:

- Diversion rate (%)
- Recycling rate (%) by material stream
- Completion of routine inspections and quarterly contamination monitoring of waste storage areas (number)
- Completion of annual waste composition audits
- Contamination rate (%) for recycling and organics streams
- Waste-generation intensity (kg/MWh, kg/MW IT load, kg/rack/year)
- Accuracy and completeness of regulated waste stream documentation (%) and
- Contractor performance against service-level KPIs.

8.2 Waste register

A waste register will be maintained and updated at least monthly and weekly during refresh or upgrade cycles. The register will include:

- Quantities of waste and resource streams (general waste, recycling, metals, organics, e-waste, batteries, lamps, oils, coolants, contaminated filters, refrigerants, and any regulated wastes)
- Storage location, collection records, contractor details and quantities
- Resource-recovery outcomes (reuse, recycling, recovery, disposal)
- Validated documentation (dockets, weighbridge receipts, certificates, consignment notes, chain-of-custody/Waste Tracker forms) and
- Contamination/non-conformance observations.

Data accuracy controls include:

- Mandatory documentation for waste movements
- Reconciliation of contractor-provided data against internal logs
- Periodic verification of contractor licensing and facility approvals and
- Embedded KPIs and contamination thresholds in service agreements.

8.3 Monitoring program

The monitoring program will include:

- Routine inspections - Weekly inspections of waste storage areas to verify segregation, signage, container condition, litter control, spill risks and security of high-risk streams
- Contamination monitoring - Quarterly contamination checks for recycling/organics using visual assessment and estimated percentage contamination levels
- Waste-composition assessments - Annual composition audits to confirm stream accuracy and identify opportunities for improved separation and recovery
- Waste contractor reporting – Waste contractors will provide weights/volumes for each service period, with required certificates for regulated streams
- Refresh/upgrade event monitoring - For IT refresh cycles, enhanced monitoring will track e-waste volumes, secure handling, packaging quantities and chain-of-custody integrity.

8.4 Incident and non-conformance reporting

Waste-related incidents include spills, leaks, contamination exceedances, missing documentation, battery related incidents, refrigerant release, unsecured e-waste, or suspected unlawful disposal. Incident response requirements include the following:

- Immediate containment and make-safe actions
- Notify the Waste and Resource Recovery Lead immediately and follow procedures within the Emergency Management Plan for any waste related incidents that may pose a risk to health or the environment. The Waste and Resource Recovery Lead will be contacted within 24 hours for minor issues
- Record incidents in the Incident Register (description, cause, corrective/preventative actions, verification and close-out)
- Escalate repeated or significant incidents to senior management
- External regulatory reporting completed where triggered under Victorian law.

8.5 Reporting outputs

Reporting outputs include:

- Monthly internal performance summaries (waste quantities, diversion rate, contamination, contractor compliance, incidents)
- Quarterly management reviews (trend analysis, KPI dashboard, audit results, improvement recommendations)
- Annual performance review (full waste profile, refresh-event summary, system-effectiveness review, and updated improvement plan).

8.6 Records management

Waste records including dockets, certificates, chain-of-custody forms, inspection records, audit findings and incident reports will be retained and stored in accordance with the organisation's document-control requirements.

8.7 Data security requirements for e-waste

Data-bearing assets will be managed under strict data-security controls during decommissioning, handling, storage, transport and destruction as outlined below:

- Scope of data-bearing equipment - Includes servers, storage devices, networking equipment, UPS modules, management controllers, IoT/telemetry devices, removable media and hardware containing NVRAM, BIOS/UEFI settings, encryption keys or configuration data.
- Secure decommissioning and wiping - Assets must be securely wiped or sanitised before leaving controlled areas using approved sanitisation methods (e.g., NIST SP 800-88 Rev.1). Failed or non-wipeable drives must be physically destroyed. Logs and verification certificates must be retained.
- Chain-of-custody requirements - Strict chain-of-custody applies from removal through final processing. Requirements include asset ID tracking, secure staging areas, sign-off at each handover and documentation for different movement stages.
- Storage and handling - E-waste must be stored in secure, access-restricted, monitored areas using lockable cages or containers. Damaged drives and batteries must be stored in fire-safe containers.
- Transport security - Transport must be conducted by pre-approved providers using sealed, tamper-evident packaging and direct routing. GPS-tracked vehicles may be used for high-value loads.
- Destruction and certification - Items not suitable for sanitisation must be destroyed using secure destruction methods (shredding, pulverising, degaussing). Certificates of Destruction must include serial numbers, quantities and destruction method.
- Records and audit requirements - Records (wiping logs, CoDs, chain-of-custody forms) must be maintained and reconciled against the Asset and Waste Registers. Annual audits will confirm compliance.
- Security incident reporting - Suspected data exposure, misplacement, tampering or discrepancy is a security incident and must be immediately reported, investigated and documented.

Appendix A. References

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