Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6537/2021/1
Works approval holder	City of Stirling
Registered business address	25 Cedric Street STIRLING WA 6021
DWER file number	DER2021/000210 & INS-0002433
Duration	17/05/2022 to 16/05/2027
Date of issue	17/05/2022
Date of amendment	9 March 2026
Premises details	Recycling Centre Balcatta 238 Balcatta Road, Balcatta BALCATTA WA 6021 Legal description - Lot 45 on Plan 194142 As defined by the map in Schedule 1

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed production capacity**
Category 62 Solid waste depot: premises on which waste is sorted or stored, pending final disposal or re-use, other than in the course of operating – (a) A refund point (as defined in the Waste Avoidance and Resource Recovery Act 2007 section 47C(1))(a refund point); or (b) A facility or other place (an aggregation point) for the aggregation of containers that have been returned to refund points until those containers are accepted for processing or disposal	107,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 9 March 2026, by:

Abbie Crawford

Digitally signed by Abbie Crawford
Date: 2026.03.09 12:31:07 +08'00'

Abbie Crawford
MANAGER, WASTE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
17/05/2022	W6537/2021/1	Works approval granted.
16/01/2025	W6537/2021/1	Works approval amended to remove all aspects apart from the Waste Transfer Station from the current Works Approval W6537/2021/1.
09/03/2026	W6537/2021/1	DWER initiated amendment to include a sweeper tailing storage area, storage bunkers and stormwater pond into the works approval.

Interpretation

In this works approval:

(a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct and/or install the infrastructure and/or equipment;

(b) in accordance with the corresponding design and construction / installation requirements; and

(c) at the corresponding infrastructure location;

as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1	Waste Transfer Station	• Constructed in accordance with Schedule 1, Figure 2. • To consist of a large steel frame shed that covers an area of 47.1 m x 49.1 m (2,313 m^2). • Flooring to consist of a N40 reinforced concrete slab, 180 mm in thickness with a 1° slope to direct any leachate towards the leachate collection and storage system. • One large concrete U-shaped bunker to be constructed with a width of 35 m and a length of 23 m • To be enclosed except for 8 fast-acting insulated high speed doors (4 doors service the tipping floor and 4 doors for the loadout lanes). • Building ventilation to consist of extraction and exhaust stacks (>4 m in height from ground level) that allow for a minimum of four changes of air per hour. • Noise absorptive cladding to be installed on the internal wall and ceilings.	As depicted in Figure 2: Proposed Site Layout Plan of Schedule 1.
2	Waste Transfer Station leachate collection infrastructure	• Waste Transfer Station to be contained by floor drains and a HDPE pipe network for discharge to a below-ground tank 1850 mm in diameter and 8710 mm in length (SPEL Tankstor or equivalent storage tank) with a 600 mm diameter manhole located outside the building. • To contain a 1800 mm diameter fiberglass submersible pumping station to pump from the storage tank.	As depicted in Figure 2: Proposed Site Layout Plan of Schedule 1.
3	Fire risk prevention and management infrastructure and equipment	• Fire mitigation infrastructure to be constructed in accordance with all relevant Australian Standards and the National Construction Code, Volume 1, (NCC). • The fire hydrant system is to be provided with pumps and tanks (if adequate pressure and flow cannot be facilitated by the town mains) and is to incorporate a	N/A

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		booster assembly, a ring main, isolation valves that will allow isolation of parts of the system in 25% increments, and external and internal (where appropriate) fire hydrants. • Waste Transfer Station to have an automatic fire sprinkler system in accordance with Clause E1.10, Specification E1.5 of NCC and AS 2118.1. • Waste Transfer Station to have fire detection and alarm system in accordance with AS 1670.1 consisting of a VESDA air sampling smoke detection system and manual call points and interfaced with the site fire detection control and indicating equipment. • System monitoring through Direct Brigade Alarm.	
4	Sweeper tailing storage area	• Must be constructed as a 7 m x 14 m storage area with a 150 mm thick concrete slab and a 300 mm bund on three sides, connecting to a gross pollutant trap (GPT) before entering the stormwater system	As depicted in Figure 2 and 3 of Schedule 1.
5	2 x storage bunkers	• Must be constructed with a concrete slab, with dimensions of 25 m × 12 m (300 m²) in accordance with Schedule 1, Figure 3 • Must contain precast bunker walls 3500 mm in height.	As depicted in Figure 2 and 3 of Schedule 1.
6	Stormwater pond	• Stormwater pond that is depicted in the Schedule 1: Figure 2 must be refurbished to meet the construction specification in Schedule 1: Figure 4 including ; - a total volume of 344 m^3; and - must be interconnected with the premises existing drainage network.	As depicted in Figure 2 and 4 of Schedule 1.

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:

(a) undertake an audit of their compliance with the requirements of condition 1; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:

(a) certification by a suitably qualified civil or structural engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and

(c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

4. Subject to condition 3(a), where an item of infrastructure or component of infrastructure has been certified as not being constructed, or does not comply with the corresponding requirements, the works approval holder must provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 1 along with the Environmental Compliance Report required by condition 3.

Time limited operations phase

Commencement and duration

5. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by conditions 2 and 3 has been submitted by the works approval holder for that item of infrastructure.

6. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 7 (as applicable):

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 2 and 3 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 6(a).

Infrastructure and equipment

7. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Waste Transfer Station	• All waste to be accepted and stored on hardstand meeting a permeability of equal to or less than 1 x 10^{-9} m/s. • Minimum of four changes of air per hour to occur within the Waste Transfer Station. • Waste must not be held on the tip floor outside of daytime operational hours. • No more than one building door (high speed roller doors) to be open at any time. • FOGO waste to only be stored and sorted within the Waste Transfer Station. • FOGO waste to be received on-site in sealed, compactor vehicles. • Transfer vehicles removing FOGO to be covered prior to exiting the Waste Transfer Station. • Daily washdown of the tipping floor to remove any organic residue.	As depicted in Figure 2: Proposed Site Layout Plan of Schedule 1.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		• Operations to only occur between 6:00 am - 7:00 pm.	
2.	Waste Transfer Station leachate collection infrastructure	• All leachate from the Waste Transfer Station to be directed to and contained within the Waste Transfer Station leachate collection infrastructure as specified in Row 2 of Table 1. • Leachate to be pumped from the storage tank regularly to empty its contents and cleaned out to avoid the generation of adverse odours that may cause pollution or environmental harm.	As depicted in Figure 2: Proposed Site Layout Plan of Schedule 1.
3.	Fire risk prevention and management infrastructure and equipment	• Fire mitigation infrastructure must be maintained in accordance with all relevant Australian Standards and the National Construction Code, Volume 1 (NCC). • The fire hydrant system must be provided with pumps and tanks (if adequate pressure and flow cannot be facilitated by the town mains) and is to incorporate a booster assembly, a ring main, isolation valves that will allow isolation of parts of the system in 25% increments, and external and internal (where appropriate) fire hydrants. • Waste Transfer Station must have an automatic fire sprinkler system in accordance with Clause E1.10, Specification E1.5 of NCC and AS 2118.1. • Waste Transfer Station must have a fire detection and alarm system in accordance with AS 1670.1 consisting of a VESDA air sampling smoke detection system and manual call points and interfaced with the site fire detection control and indicating equipment. • System monitoring through Direct Brigade Alarm must be maintained. • A gate valve between the storage and infiltration tank must be maintained to prevent firefighting water from entering the infiltration tank.	N/A
4	Sweeper tailing storage bunkers	• All concrete hardstand and bunds to be maintained free from cracks, leaks or defects. • Must drain leachate to a gross pollutant trap. • The gross pollutant trap must be regularly maintained to ensure efficient drainage.	As depicted in Figure 2 and 3 of Schedule 1.
5	Storage bunkers	• Must only be used for the storage of inert waste prior to removal from the premises for recycling or reuse.	As depicted in Figure 2 and 3 of Schedule 1.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
6	Stormwater pond	• Maintained with a minimum top-of-embankment freeboard of 500 mm during operation.	As depicted in Figure 2 and 4 of Schedule 1.

Waste acceptance

8. The works approval holder must only accept onto the premises waste of a type that:

(a) does not exceed the rate at which that waste is received; and

(b) meets the relevant acceptance specification,

Table 3: Waste acceptance criteriaas set out in Table 3.

Waste type	Rate at which waste is received	Acceptance specification
Food organics and garden organics (FOGO)	30,000 tonnes during time limited operations	• Accepted from municipal kerbside collections and commercial sources only. • Accepted and stored within the Waste Transfer Station only.
Putrescible waste (excluding FOGO and green waste)	77,000 tonnes during time limited operations	• Accepted and stored within the Waste Transfer Station only.
Inert Waste Type 1		N/A
Inert Waste Type 2		• Tyres and plastic only. • Less than 100 tyres to be stored at the premises at any one time

9. The works approval holder must visually inspect all waste on arrival at the Premises to ensure that it complies with the waste acceptance criteria in Table 3.

10. The works approval holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 9 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility within 7 days of receipt.

Monitoring during time limited operations

11. The works approval holder must record the total amount of waste accepted and removed from the premises, for each waste type listed in Table 4, in the corresponding unit, and for each corresponding time period, as set out in Table 4.

Table 4: Waste accepted and removed from the premises

Waste type	Unit	Time period
Food organics and garden organics (FOGO)	tonnes	During time limited operations
Putrescible waste (excluding FOGO and green waste)		
Inert Waste Type 1		
Inert Waste Type 2		

Odour monitoring

12. The works approval holder must retain the services of a suitably qualified person to:

(a) Plan and implement a minimum of three odour field assessments (OFAs) which follow the plume measurement methodology as specified in the DWER *Guideline: Odour Emissions* and the *European Standard EN 16841-2 (plume method)*. OFAs are to be undertaken:

(i) with the prime objective of characterising odour plume extents in the directions of receptors which are most likely to be impacted by odour;
(ii) during meteorological and operational conditions most likely to cause impacts at these receptors;
(iii) over the time limited operations period, with each OFA conducted at least two weeks apart; and

(b) compile and submit to the works approval holder within six weeks of completion of the final OFA field campaign, an OFA report in accordance with condition 13.

13. An OFA report prepared pursuant to condition 12 is to include:

(a) the objective of the assessment;

(b) a description of the measurement strategy, measurement conditions and the odour field survey standards that were followed;

(c) the following details for each single measurement:

(i) odour intensity levels and odour characters;

(ii) location and time;

(iii) field survey odour panellist identification; and

(iv) details of waste storage volumes held and/or transferred through the site during the assessment period.

(d) the following representative meteorological measurements as recorded during the measurement cycle:

(i) wind speed (metres per second);

(ii) wind direction;

(iii) cloud cover estimate;

(iv) temperature;

(e) map(s) depicting the assessment area, odour sources at the premises and other potential odour sources (if relevant);

(f) a graphical summary of field survey results showing the recorded odour intensity levels either as a percentage of total observations using pie charts if the stationary plume method was used or as coloured dot points if the dynamic

plume method was used that will be superimposed at each point assessed on a map of the survey area;

(g) any deviations from the conditions targeted in the OFA strategy and those occurring during the measurement (conclusions should reflect the influence of such deviations on the results); and

(h) detailed analysis, interpretation and conclusions with regard to the objectives of the assessment.

Compliance reporting

14. The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.

15. The works approval holder must ensure the report required by condition 14 includes the following:

(a) a summary of the time limited operations;

(b) a summary of waste throughputs (inputs and outputs) recorded under condition 10;

(c) the OFA report as specified in condition 12 and 13;

(d) a summary of the environmental performance of all infrastructure as constructed or installed;

(e) a review of performance and compliance against the conditions of the works approval; and

(f) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

16. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.

17. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:

(a) the works conducted in accordance with condition 1;

(b) complaints received under condition 16.

18. The books specified under condition 17 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the works approval holder for the duration of the works approval; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 5 have the meanings defined.

Table 5: Definitions

Term	Definition
annual period	a 12-month period commencing from 1 January until 31 December of the immediately following year.
AS 2118.1	means AS 2118.1:2017 Automatic fire sprinkler systems - General systems.
AS 1670.1	means AS 1670.1:2018 Fire detection, warning, control and intercom systems - System design, installation and commissioning – Fire.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
FOGO	means food organics and garden organics waste collected from kerbside municipal collections
National Construction Code, Volume 1	means National Construction Code, Building Code of Australia, 2019: Volume 1, Amendment 1.

Term	Definition
Odour panellist	means a person who is qualified to perform field inspections as described in EN 16841-2 and is independent of the works approval holder
OFA	odour field assessment as described in the *Guideline: Odour Emissions*
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
suitably qualified civil or structural engineer	means a person who: (a) holds a Bachelor of Engineering recognised by the Institute of Engineers; and (b) has a minimum of five years of experience working in a supervisory area of civil or structural engineering; and (c) is employed by an independent third party external to the works approval holder's business; or is otherwise approved in writing by the CEO to act in this capacity
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below

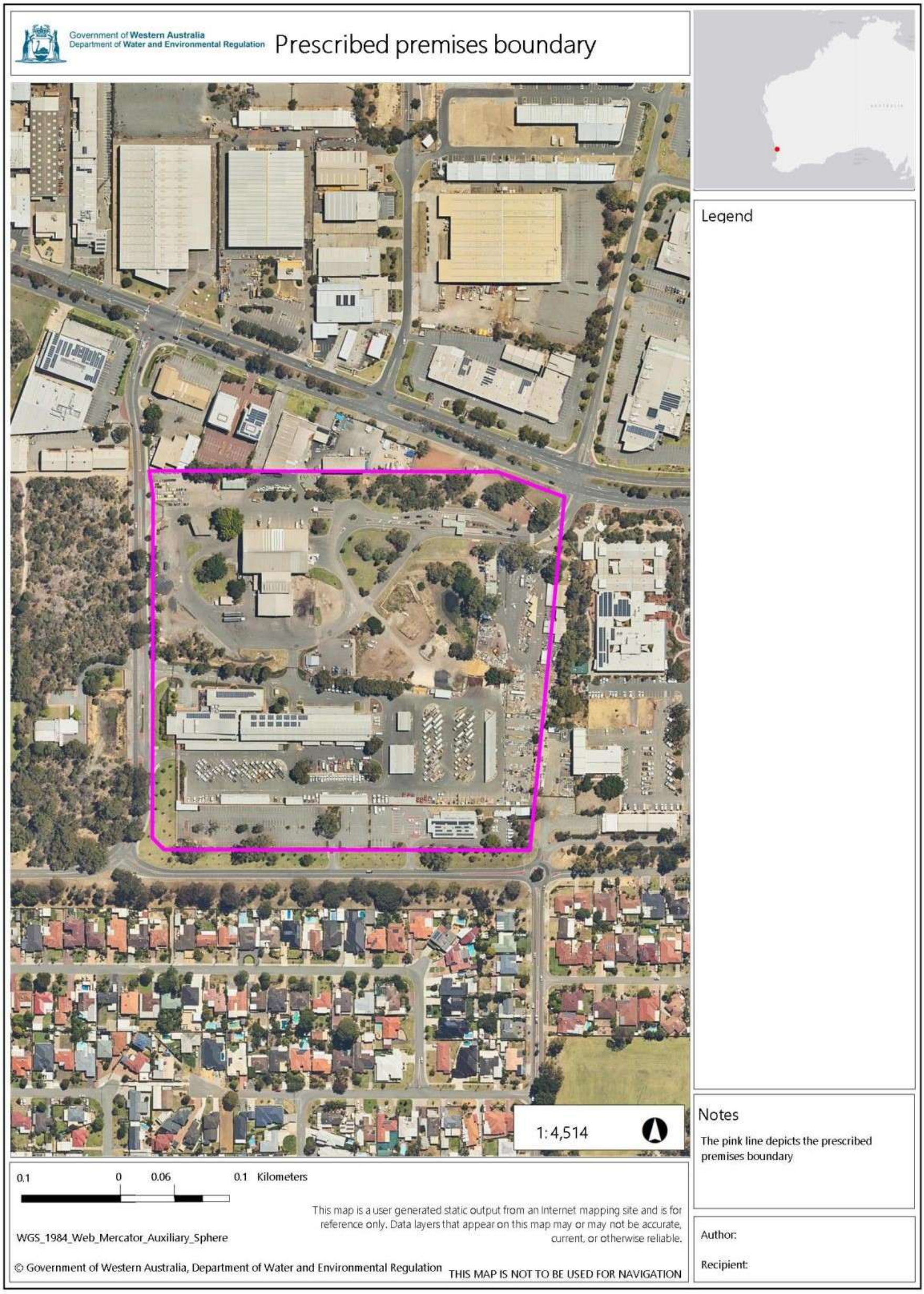

Figure 1: Map of the boundary of the prescribed premises

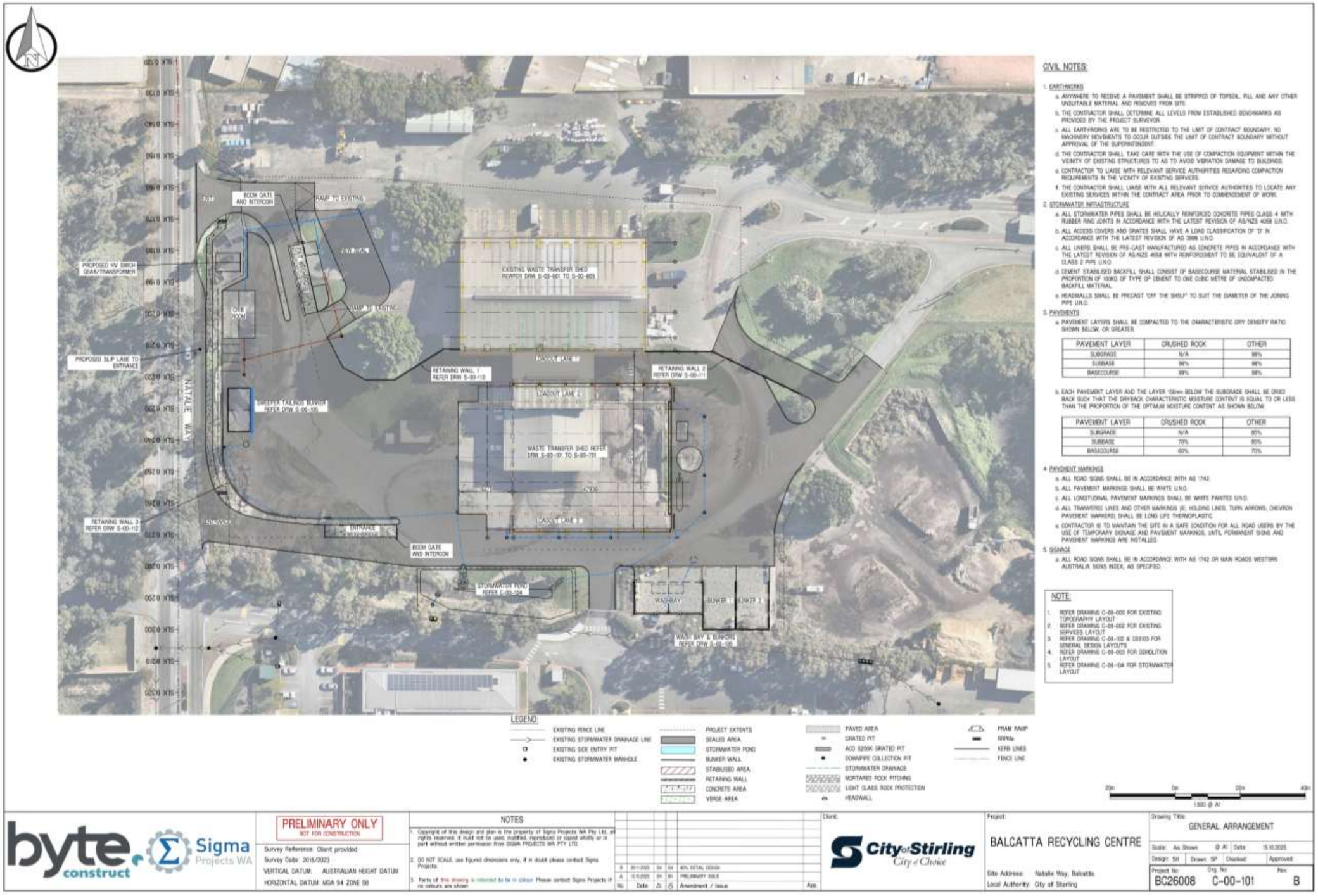

Figure 2: Proposed Site Layout Plan

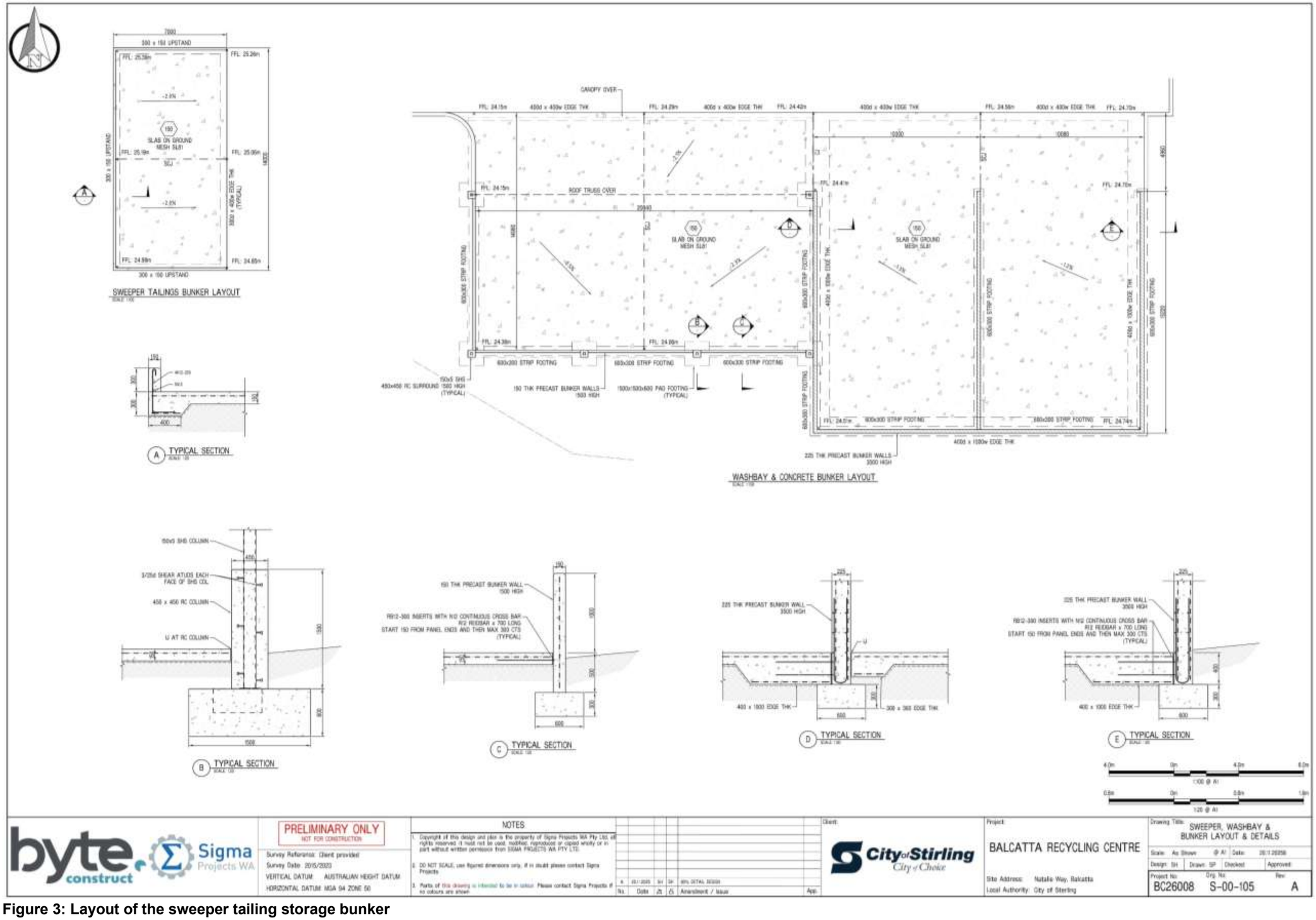

Figure 3: Layout of the sweeper tailing storage bunker

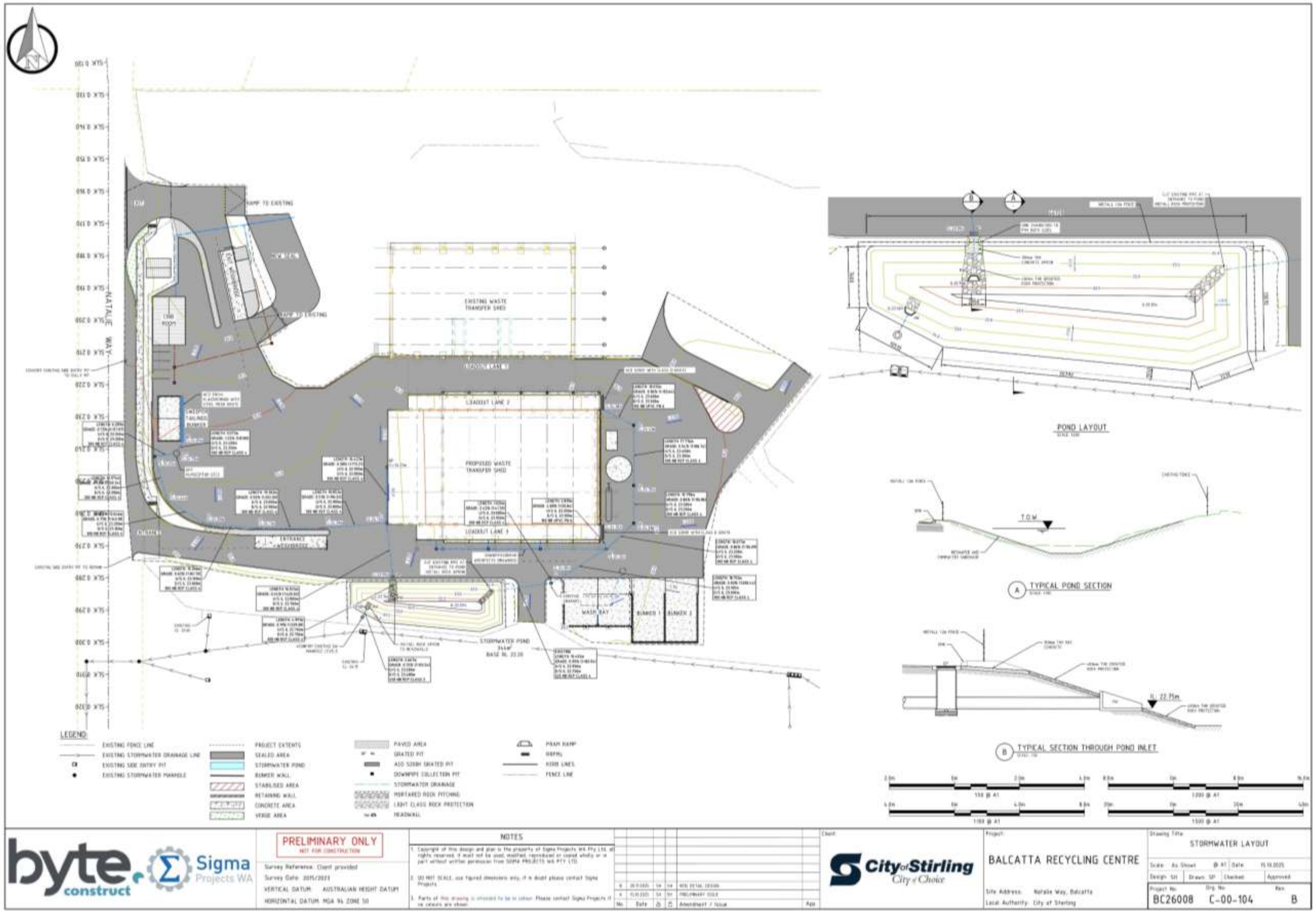

Figure 4: Layout of the stormwater pond