Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9377/2023/1
Licence holder	Shire of Coolgardie
Registered business address	Sylvester Street COOLGARDIE WA 6429
DWER file number	DER2022/000612
Duration	03/07/2023 to 02/07/2043
Date of issue	03/07/2023
Date of amendment	18/09/2025
Premises details	Coolgardie Waste Facility Coolgardie Tip Road COOLGARDIE WA 6492 Legal description - Crown Reserve 3497 Lot 501 on Deposited Plan 255090 As defined by the map and coordinates in Schedule 1 and 2

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed design capacity**
Category 57 Used tyre storage (general): premises (other than premises within category 56) on which used tyres are stored	No more than 500 tyres
Category 61 Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	2,000 tonnes per annual period
Category 61A Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	2,000 tonnes per annual period
Category 62 Solid waste depot: premises on which waste is stored or sorted, pending final disposal or re-use.	5,000 tonnes per annual period
Category 63 Class I inert landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the *Landfill Waste Classification and Waste Definitions 1996*, is accepted for burial.	4,000 tonnes per annual period
Category 64 Class II or III putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the *Landfill Waste Classification and Waste Definitions 1996*, is accepted for burial.	50,000 tonnes per annum.

This licence is granted to the licence holder, subject to the attached conditions, on 18 September 2025, by:

Grace Heydon

Digitally signed by Grace Heydon
Date: 2025.09.18 10:32:59 +08'00'

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

Licence history

Date	Reference number	Summary of changes
02/09/2021	W6534/2021/1	Works approval granted.
03/07/2023	L9377/2023/1	New licence granted
13/02/2024	L9377/2023/1	Licence amendment for increasing Category 64 waste to 50,000 tpa, addition of green waste mulching to Category 61A activities, deletion/amendment of due dates for infrastructure construction.
18/09/2025	L9377/2023/1	Licence amendment: for the construction and operation of class II landfill trenches; and to authorize re-use of treated effluent for dust suppression.

Interpretation

In this licence:

(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 licence:

  (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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

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

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment		Operational requirement	Infrastructure location
1.	Fencing and site security	a) Suitable fencing must be erected and maintained to prevent unauthorised access to the premises; b) Any entrance gates to the premises must be securely locked when the premises is unattended; and c) Weekly inspections of all security measures must be undertaken and any damage must be repaired within 10 working days of its discovery.	Site perimeter
2.	Signage	a) Signage must be erected and maintained at the entrance to the premises which clearly displays the following information: i. hours of operation; ii. contact telephone number; iii. a warning indicating penalties for people lighting fires; and iv. list of materials accepted for recycling and the location of where they can be deposited on the premises.	All entrances to the premises
		b) Signage must be erected and maintained at the mulch stockpile at the premises which clearly notifies mulch users that: i. mulch has not been pasteurised; ii. mulch does not meet Australian Standard AS 4454; and iii. mulch may contain contaminants.	Mulch stockpile
3.	Weighbridge	a) Able to be calibrated as required in accordance with legislative requirements; and b) Capable of determining the mass of a vehicle, including, but not limited to, prime movers, rubbish trucks and connected trailers.	As depicted in Schedule 1, Figure 2
4.	Perimeter screening berm	a) 730 m in length; b) Accommodate an 8 m wide access track at the crest of the berm; and c) Maintained with vegetation cover to the slopes of the berm to prevent erosion.	As depicted in Schedule 1, Figure 2

Site infrastructure and equipment		Operational requirement	Infrastructure location
5.	Used battery storage shed	a) Comprises an impervious, concrete hardstand; b) Covered (roofed) to prevent rainwater ingress to storage areas; c) Of sufficient size to accommodate self-bunded pallets; and d) Hardstand is maintained to ensure that any cracks or damage are rectified (sealed) to prevent emissions (leaks and spills) to land and/or water.	As depicted in Schedule 1, Figure 2
6.	Paint storage shed	a) Comprises an impervious concrete hardstand; b) Covered (roofed) to prevent rainwater ingress; c) Of sufficient size to accommodate self-bunded pallets for storage of paint containers; and d) Hardstand is maintained to ensure that any cracks or damage are rectified (sealed) to prevent emissions (leaks and spills) to land and/or water.	As depicted in Schedule 1, Figure 2
7.	Waste oil storage shed	a) Comprises an impervious concrete hardstand; b) Covered (roofed) to prevent rainwater ingress; c) Of sufficient size to accommodate self-bunded pallets or containers; and d) Hardstand is maintained to ensure that any cracks or damage are rectified (sealed) to prevent emissions (leaks and spills) to land and/or water.	As depicted in Schedule 1, Figure 2
8.	General Solid Waste Drop-off area, Mulching and Mulch Stockpile Area	a) Comprised of a concrete hardstand and concrete push walls; and b) Hardstand is maintained to ensure that any cracks or damage are rectified (sealed) to prevent emissions (leaks and spills) to land and/or water.	As depicted in Schedule 1, Figure 2
9.	Internal dividing bund wall	a) 1 m (width) x 1 m (height) compacted clay intermediate bund wall constructed at stage 1 and 2 interface to prevent leachate discharging from an active landfilling area into inactive areas of the cell, and the flow of stormwater runoff into active tipping areas; and b) Maintained to ensure erosion form rainfall events does not compromise the integrity of the barrier.	At the stage 1 and 2 interface s depicted in Schedule 1, Figure 6
10.	Stage 1 Class III landfill cell	a) The integrity of the composite geosynthetic liner must be maintained; and b) Sidewalls must be inspected following intense rainfall events and any identified erosion scours repaired as necessary to maintain the protection layer.	As depicted in Schedule 1, Figure 2

Site infrastructure and equipment		Operational requirement	Infrastructure location
11.	Class III landfill leachate conveyance system (pumps and pipework)	a) Minimum leachate pump capacity of 3 x 10^{-4} m^3/s (0.3 L/s) with a minimum head height of 20 m; b) Pump fitted with 50 mm pipe outlet; and c) Flexible HDPES PE100 pipework suitable for high-demand applications in accordance with ISO 4427-1:2019.	Not specified
12.	Class III landfill leachate evaporation pond	a) Permeability of less than 1 x 10^{-9} m/s or equivalent; b) 0.5 m freeboard maintained; and c) Leachate bund wall raised 1 m above ground to prevent stormwater inflows.	As depicted in Schedule 1, Figure 2
13.	Stormwater diversion bunds, perimeter surface water swales and stormwater retention basin.	Stormwater diversion bunds: a) 0.5 m high perimeter diversion bund maintained on the crest of the cell walls; b) Sidewalls and crest must be inspected following intense rainfall events and any identified erosion scours repaired as necessary to maintain structural integrity; Surface water swales: c) Surface water swales to direct captured surface water to the stormwater basin; and Stormwater retention basin: d) Compacted Clay Liner (CCL) maintained on the base and side-slopes to provide a uniform sealing layer.	As depicted in Schedule 1, Figure 2 and Figure 3
14.	Asbestos monocell	a) A 0.5 m high perimeter surface water bund must be maintained around the entirety of the cell; and b) The surface water bund must be inspected following intense rainfall events and any identified erosion scours repaired as necessary to maintain structural integrity.	'New Asbestos Area' as depicted in Schedule 1, Figure 2
15.	Tyre monocell	a) A 0.5 m high perimeter surface water bund must be maintained around the entirety of the cell; and b) The surface water bund must be inspected following intense rainfall events and any identified erosion scours repaired as necessary to maintain structural integrity.	'Tyre Monofill Area" as depicted in Schedule 1, Figure 2
16.	Tyre storage bay	a) Must comprise a flat area surrounded on three sides by an earthen bund wall that is capable of containing any stored tyres. b) The bund wall must be inspected following intense rainfall events and any identified erosion scours repaired as necessary to maintain	'Tyre Storage Bay" as depicted in Schedule 1, Figure 2

Site infrastructure and equipment		Operational requirement	Infrastructure location
		structural integrity.	
17.	Groundwater monitoring bores BH01, BH02 and BH03	a) Must be maintained free from blockages and in good working order to allow representative groundwater samples to be taken.	At the locations specified in Table 11
18.	Four Class II landfill trenches in stages	a) Landfill trenches may only receive waste (Inert Waste Types 1 and 2, putrescible waste, clean fill, Special Wastes Type 1, Type 2 and contaminated solid waste) once the compliance reports described in Condition 21 and 22 have been submitted to the department. b) Maintain an undisturbed separation distance of at least 3m between the base of the landfill disposal area to the highest level of groundwater. c) Waste must be placed in the defined trench. d) Must stockpile soil onsite for use as cover material during landfill operations. e) Ensure each cell must be able to store a minimum of 13,975 tonnes of class II waste;	As depicted in Schedule 1, Figure 2

Waste acceptance

2. The licence holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 2.

Table 2: Types of waste authorised to be accepted onto the premises

Waste type	Category	Rate at which waste is received	Acceptance specification
Liquid Household Hazardous Wastes	Category 61	2,000 tonnes per annual period.	a) Limited to domestic hazardous waste types as listed in Schedule 2 (up to a maximum of 20 litres or 20 kilograms per package/item).
Waste oil			a) Limited to packaged waste oils, hydrocarbons, industrial lubricants, and oil and water mixtures or emulsions.
Waste paint			a) Paints and resins only.
Green waste	Category 61A	2,000 tonnes per annual period.	a) Green waste accepted for mulching is limited to uncontaminated green waste, garden organics, natural fibrous organics, untreated timber and forestry residues. b) Excludes engineered wood products and timber treated with preservatives, pesticides, paint, fire retardants, adhesives or with any non-biodegradable layer. c) Excludes material from source-separated

Waste type	Category	Rate at which waste is received	Acceptance specification
			kerbside municipal collections of designated garden organics (GO) bins. d) Green waste that does not meet the above acceptance specifications, may be accepted for disposal via burning.
Scrap metal and car bodies	Category 62	5,000 tonnes per annual period.	None specified.
White goods			None specified.
Gas cylinders			a) Degassed prior to acceptance at the premises.
Used batteries			None specified.
Polyethylene (PE) and Polyvinyl Chloride (PVC)			a) Uncontaminated PE and PVC waste products only.
Mattresses			None specified.
Solid Household Hazardous Wastes			a) Limited to domestic hazardous waste types as listed in Schedule 2 (up to a maximum of 20 litres or 20 kilograms per package/item).
Inert waste type 2 (used tyres and conveyor belt rubber)	Category 63	5,000 tyres per annual period.	None specified.
Special waste type 1		4,000 tonnes per annual period.	a) Must be wrapped, labelled, and sealed in heavy duty (200 µm) polythene sheeting or equivalent containers that prevents asbestos fibres entering the atmosphere.
Clean fill	Category 64	Combined total of 50,000 tonnes per annum.	a) To be unloaded onto the dedicated concrete drop-off hardstand for inspection and sorting.
Uncontaminated fill			
Inert waste type 1			
Inert waste type 2			
Putrescible waste			a) From domestic and commercial sources only; and b) Excludes bulk green waste. c) Waste to be disposed in the class II landfill trench must meet the acceptance criteria for Class II landfills as specified in the Landfill Definitions.

Waste type	Category	Rate at which waste is received	Acceptance specification
Neutralised acid sulfate soil			a) Must meet the acceptance criteria for Class III landfills as specified in the Landfill Definitions.
Special waste type 2			a) Biomedical and clinical wastes excluding wastes which require incineration as specified in Department of Health Code of Practice for Clinical and Related Waste Management, *Public Health Act 2016* (February 2021). b) Waste to be disposed in the class II landfill trench must meet the acceptance criteria for Class II landfills as specified in the Landfill Definitions.
Special waste type 3			a) Must meet both the relevant PFAS leachable concentration limits and the relevant PFAS total concentration limits as specified in Table 7 of the PFAS National Environmental Management Plan for a clay/single composite lined landfill type; and b) Must meet the acceptance criteria for Class III landfills as specified in the Landfill Definitions for contaminants other than PFAS.
Contaminated solid waste			a) Must meet the acceptance criteria for Class III landfills as specified in the Landfill Definitions. b) Waste to be disposed in the class II landfill trench must meet the acceptance criteria for Class II landfills as specified in the Landfill Definitions.

3. During pre-inspection of waste loads at the gatehouse, where waste does not meet the waste acceptance requirements set out in condition 2, the licence holder must:

(a) record the details of the:

(i) waste (type, description and volume);

(ii) source of the waste load;

(iii) name of the waste carrier;

(iv) registration number of the delivery vehicle; and

(v) date that the waste load was rejected,

and

(b) reject the waste and have it removed from the premises by the waste supplier's delivery vehicle;

or

(c) where the waste supplier cannot immediately remove the waste in the delivery vehicle, it is stored in a quarantined storage area or container and removed to an appropriately authorised facility within 14 days of receipt.

Waste processing and operations

4. The licence holder must ensure that wastes accepted onto the premises are only subjected to the processes set out in Table 3 and in accordance with any process limits or specifications described in that table.

Table 3: Waste processing

Category	Waste type	Processes	Process limits or specifications [1, 2]
Category 57	Used tyres	Stockpiling and storage prior to burial.	a) No more than 500 tyres shall be stored above ground at the premises at any one time; b) Storage must occur within the "Tyre storage bay" as defined in Schedule 1, Figure 2; c) Tyres must be stored in the following arrangement: i. stacked on their side or in the laced storage format depicted in Figure 8, or if stored on their treads, be baled with a non-combustible securing device; ii. within tyre stacks that do not exceed 3.7 m in height and 60 m^2 in area in accordance with Figure 9; iii. within tyre piles that contain a maximum of four tyre stacks with a minimum separation distance of 2.5 m between each stack, in accordance with Figure 10; and iv. a minimum separation distance of 18 m must be maintained between each tyre pile, in accordance with Figure 11. d) Storage must not obscure fire protection equipment (including fire hydrants and fire hoses) or related signage.
Category 61	Liquid Household Hazardous Wastes	Storage pending offsite disposal.	a) Must be stored within a lockable shed on self-bunded palettes prior to transportation to a waste facility approved for the storage or processing of such waste.
	Waste oil	Consolidation and storage prior to offsite removal.	a) Waste oils and paints must be stored in a fully enclosed and bunded area/container prior to removal for disposal offsite. b) Waste paint must be stored on self-bunded palettes within the designated paint storage shed.
	Waste paint	Storage only prior to offsite removal.	
	Treated effluent water	30,000 litres of treated effluent wastewater will be delivered in control waste truck per day	The licence holder must ensure that the re-use of treated effluent must meet the following requirement: a) Only treated effluent from the Coolgardie Wastewater Treatment Plant may be

Category	Waste type	Processes	Process limits or specifications [1, 2]
			accepted onto the premises. b) Treated effluent may only be used on site for the purpose of dust suppression via water carting. c) Treated effluent accepted onsite must meet the following requirements: (i) E coli: <10 cfu/100mL (ii) pH 6.5 – 8.5 (iii) BOD 30 mg/L (iv) TSS 40 mg/L (v) TN 50 mg/L (vi) TP 12 mg/L d) Has signage installed around the boundary of the premises identifying irrigation of treated wastewater within the premises boundary. e) Spills or leaks of treated effluent that does not meet the requirements of part (c) must be immediately contained and cleaned up. f) Treated effluent discharged for dust suppression outside of engineered containment infrastructure must not exceed 30kL/day; and g) Treated effluent used for dust suppression must be used in such a manner that prevents: (i) the pooling or ponding of water; (ii) erosion or scouring; (iii) waterlogging or runoff; and (iv) overspray leaving the premises boundary.
	Green waste	Receipt, handling, storage and shredding/mulching	a) No more than 2,000 m^3 (300 tonnes) of green waste shall be stored at the green waste stockpiling and processing area at any one time awaiting mulching. b) No more than 1,000 m^3 (150 tonnes) of mulched green waste shall be stored at the mulching and mulch stockpile area any one time. c) Incoming loads of green waste are to be inspected weekly to identify and remove weeds and other contaminants. d) Where weeds and contaminants are removed from the green waste, the contaminants are to be isolated at the green waste stockpile and processing area and disposed of via burning or landfiling. e) Green waste awaiting shredding/mulching, and mulched green waste must be stored in

Category	Waste type	Processes	Process limits or specifications [1, 2]
			windrows; f) Mulched green waste must be stored on a bunded hardstand; g) Individual green waste windrows are to be maintained at a maximum dimension of 50 m long, 10 m wide and 5 m high; h) The temperature of mulch stockpiles must be monitored, at least weekly, to ensure temperature is maintained below 75°C; and i) A five-metre firebreak shall be maintained between windrows and around the areas used to store green waste and mulch.
	Green waste	Storage and curing prior to disposal via burning	a) Must be unloaded and cured for at least two months in the dedicated green waste stockpiling and processing area as depicted in Figure 2.
		Disposal via burning.	a) Only green waste that has been cured and seasoned for at least 2 months is permitted to be burnt. b) Must only be burnt inside the dedicated earthen bays within green waste stockpiling and processing area (as depicted in Figure 2), so as to contain green waste and prevent dispersal by strong winds. c) Must be burnt quickly and in such a way that the generation of smoke is minimised. d) Burning must not commence before 8 a.m. and the burnt green waste must be made safe (fully extinguished) by 12-noon on the same day. e) A fire fighting vehicle and two persons, who have such qualifications in firefighting as are approved, must be present onsite while green waste is being burnt. The fire fighting vehicle must: i. be carrying at least 500 L of water; ii. be fitted with at least 30 m of 19 mm diameter rubber hose; and iii. contain a pump with capacity to deliver a minimum 250 L of water per minute at a pressure of no less than 700 kPA through a nozzle that projects water by spray or jet. f) The Department of Fire and Emergency Services must be notified at least 24 hours prior to commencing burning. Following burning, ashes will be wetted to minimise wind-driven dispersion, and disposed of to the Class III landfill cell once they have cooled.

Category	Waste type	Processes	Process limits or specifications [1, 2]
Category 62	Scrap metal and car bodies	Storage only prior to offsite removal.	a) Must be stockpiled in the dedicated scrap metal and car body stockpile as depicted in Figure 2.
	White goods		a) Must be stored within a designated area to be degassed by a suitably licensed person before being moved into the scrap metal stockpile.
	Gas cylinders		a) Gas bottles must be degassed and stored outside in a suitably designed cage adjacent to the scrap metal stockpile.
	Used batteries		a) Must be stored in fully sealed bins or self-contained plastic bunds within the designated used battery storage shed. b) Batteries must be segregated by type.
	Polyethylene (PE) and Polyvinyl Chloride (PVC)		a) Stockpiled in the dedicated area on the northeast corner of the premises as shown in figure 2. b) Stockpile dimensions must not exceed 10 m in length, 5 m in width and 5 m in height.
	Construction and demolition waste	Storage and stockpiling prior to burial or use as cover.	a) Stored on one of three hardstand areas in the centre of the premises as shown in Figure 2. b) Stockpile dimensions must not exceed 25 m in length, 20 m in width and 10 m in height.
	Mattresses	Storage pending offsite disposal or landfilling within the premises.	a) No more than 200 mattresses shall be stored onsite at any one time. b) Mattresses to be stored on the dedicated laydown area as depicted in Figure 2. c) Mattresses to be stockpiled in 2 orderly stacks no more than 10 mattresses in height, and 10 mattress widths in length, with a 3 m separation between each stack.
	Solid Household Hazardous Wastes	Storage pending offsite disposal.	a) Must be stored within a lockable shed on self-bunded palettes prior to transportation to a waste facility approved for the storage or processing of such waste.
Category 63	Inert waste type 2 (used tyres and conveyor belt rubber)	Burial in dedicated on-site tyre monocell, or disposal by landfilling to onsite Class III cells.	a) Must be buried in layers that are no more than 2 m deep. b) Layers must be separated by at least 300 mm of clean fill when disposed of in the monocell. c) Refer also to ‘Note 1’ at the end of this Table.
	Special waste type 1	Disposal and burial in a dedicated asbestos burial	a) Must only be disposed of into a designated asbestos disposal area. b) Disposal and burial must occur in a manner

Category	Waste type	Processes	Process limits or specifications [1, 2]
		area.	that prevents asbestos fibres entering the atmosphere. c) Must not be deposited within 2 m of the final tipping surface. d) No works shall be carried out on the burial area that could lead to a release of asbestos fibres e) The licence holder must witness the burial of the asbestos waste as soon as practical after placement in the burial area. f) The licence holder must sign a bound numbered register, a numbered file register or equivalent record keeping system within two hours of the burial to attest that it has been buried in accordance with the specifications set out in this table and the cover requirements provided in Table 4. g) The disposal and burial area(s) must be defined by use of a satellite geographical positioning system or grid references on the premises plan. h) A copy of the premises plan marked with the locations used for asbestos disposal and burial as described above, must be kept as a permanent record.
Category 64	Clean fill Inert waste type 1 Inert waste type 2 Uncontaminated fill Neutralised acid sulfate soil	Disposal of waste by landfilling.	None specified.
	Putrescible waste		a) Dead animals must be covered as soon as practicable and at least by the end of the working day. b) Disposal of class II waste by landfilling must only take place within the landfill trench area shown on the premises layout plan in Schedule 1; Figure 2 c) Waste must be placed in a defined trench or within an area enclosed by earthen bunds; d) The active tipping area must be restricted to a maximum linear length of 165 m. e) Maintain an undisturbed separation distance of at least 3m between the base of the landfill disposal area to the highest level of groundwater.

Category	Waste type	Processes	Process limits or specifications [1, 2]
	Special waste type 2		a) Not to be deposited within 2 m of the final tipping surface of the landfill. b) No works shall be carried out on the landfill that could lead to biomedical wastes being excavated or uncovered.
	Special waste type 3		a) Must be deposited directly into the landfill cell or where this cannot occur, stored within a sealed container located on a bunded hardstand to prevent rainfall penetration and runoff.
	Contaminated solid waste		None specified.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

5. The licence holder must ensure that cover is applied to waste in accordance with Table 4 and that sufficient stockpiles of cover material are maintained onsite at all times.

Table 4: Cover requirements

Waste type	Material[1]	Depth[1]	Timescales
Inert Waste Type 1	No cover required.		
Uncontaminated fill			
Clean fill			
Inert Waste Type 2[1]	Inert waste type 1, clean fill, soil or clay.	100 mm	As soon as practicable after deposit and at least by the end of the working day.
Putrescible Wastes	Inert waste type 1, clean fill, soil or clay.	150 mm	
Special Waste Type 1 – wrapped in heavy plastic	Inert waste type 1, clean fill, soil or clay.	150 mm	
Special Waste Type 1 – ACM and/or asbestos contaminated soil that is not wrapped in heavy duty plastic	Inert waste type 1[2] or clean fill, soil or clay.	300 mm	Immediately after deposit and prior to compaction.
Special Waste Type 2	Inert Waste type 1 or Clean Fill, soil or clay.	300 mm	As soon as practicable after deposit and at least by the end of the working day.
Special Waste Type 3	Inert waste type 1, clean fill, soil or clay.	300 mm	

Waste type	Material[1]	Depth[1]	Timescales
Contaminated solid waste	Inert waste type 1, clean fill, soil or clay.	150 mm	By the end of the working day.
Neutralised acid sulfate soils			

Note 1: Requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.
Note 2: Inert waste type 1 materials used for the cover of unwrapped/uncontained asbestos contaminated soils must be equal to or less than 10 mm fraction size and uniform in profile to eliminate void spaces in the cover layer.

Emissions and discharges

Dust

6. The licence holder must ensure that any dust emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises.

7. The licence holder must manage dust generation at the premises by:

(a) limiting all vehicle traffic within the premises to speeds of less than 15 km/hr in public access areas and 40 km/hr in back of house areas;

(b) ceasing dust-generating activities during strong wind conditions; and

(c) minimising waste material dumping and offloading heights.

8. The licence holder must ensure that:

(a) unsealed roads;

(b) the active tipping area; and

(c) waste materials with the potential to generate dust during unloading or stockpiling,

are wetted down during operations at all times.

Windblown waste

9. The licence holder must ensure that:

(a) windblown waste is prevented from crossing the premises boundary; and

(b) any windblown waste is collected on at least a weekly basis and returned to the active landfilling area or otherwise appropriately contained.

Fire management

10. The licence holder must ensure:

(a) that fire-fighting equipment and systems are in good working order and capable of controlling and extinguishing a waste material fire within the premises;

(b) that water and other waste that may result from firefighting on the premises is captured[1] and contained[1] within the premises to prevent fire water run-off from entering the ground or any surface watercourse;

(c) that any recoverable fire-fighting water is removed from the premises by a carrier licensed under the Environmental Protection (Controlled Waste) Regulations 2004 and disposed of to a suitably licensed premises; and

(d) that any fire on the premises is extinguished as soon as possible.

Note 1: Capture and containment may be achieved using bunding, stormwater drain cut-off valves, drain blocks and/or other equipment or infrastructure capable of retaining fire-fighting waters and debris on the premises.

Monitoring

11. The licence holder must record the total amount of waste accepted onto the premises, for each waste type listed in Table 5, in the corresponding unit, and for each corresponding time period, as set out in Table 5.

Table 5: Monitoring of inputs and outputs

Waste type	Parameter	Units	Frequency
All waste types as set out in Table 2.	Waste inputs.	Tonnes	Each load arriving at the premises.
	Waste outputs.		Each load rejected from or removed from the premises.

12. The licence holder must conduct a groundwater, leachate, treated effluent and surface water monitoring program in accordance with the requirements specified in Schedule 4: Monitoring and record the results of all monitoring activity conducted under that program.

13. The licence holder must adhere to the field quality assurance and quality control procedures specified in Schedule 4: Monitoring for the monitoring required by condition 12.

14. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 4: Monitoring.

Records and reporting

Records

15. The licence holder must record the following information in relation to complaints received by the licence 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 licence holder to investigate or respond to any complaint.

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

(a) the calculation of fees payable in respect of this licence;

(b) the works conducted in accordance with condition 21 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

(d) monitoring programs undertaken in accordance with conditions 11 and 12 of this licence; and

(e) complaints received under condition 15 of this licence.

17. The books specified under condition 16 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 licence holder for the duration of the licence; and

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

Reporting

18. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 30 September each year.

19. The licence holder must:

(a) prepare an environmental report that provides information in accordance with Table 6 for the preceding annual period; and

(b) submit the environmental report to the CEO by 30 September each year.

Table 6: Environmental reporting requirements

Condition or Table (if relevant)	Requirements
Table 5	Monitoring of waste inputs and outputs.
Table 12	Monitoring of ambient groundwater quality, including: a) a clear statement of the scope of work carried out; b) a description of the field methodologies employed; c) a summary of the field and laboratory quality assurance / quality control (QA/QC) program; d) copies of the field monitoring records and field QA/QC documentation; e) an assessment of reliability of field procedures and laboratory results; f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis; g) a diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours, flow direction and hydraulic gradient (relevant site features including discharge points and other potential sources of contamination must also be shown);

Condition or Table (if relevant)	Requirements
	h) an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites; i) an interpretive summary and assessment of results against previous monitoring results; and j) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.
Table 13	Monitoring of surface water and leachate quality, including: a) a clear statement of the scope of work carried out; b) a description of the field methodologies employed; c) a summary of the field and laboratory quality assurance / quality control (QA/QC) program; d) copies of the field monitoring records and field QA/QC documentation; e) an assessment of reliability of field procedures and laboratory results; f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis; g) a diagram with aerial image overlay showing all monitoring locations (relevant site features including discharge points and other potential sources of contamination must also be shown); h) an interpretive summary and assessment of results against previous monitoring results; and i) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.
Table 14	Monitoring of treated effluent quality, including: a) Tabulated monitoring data results showing concentrations of all parameters. b) An interpretation of the monitoring data including comparison to historical trends, emission limits or expected manufacturer's maximum specifications. c) Cumulative monthly volumes of treated effluent discharged to the irrigation areas. d) Calculation of the annual nutrient loading rates applied to the irrigation areas during the annual period.
-	Summary of any failure or malfunction of any pollution control equipment and any incidents that have occurred during the annual period and any action taken.
Condition 4	Details of all green waste burns conducted over the course of the annual reporting period.
Condition 15	Complaints summary.

Notifications

20. The licence holder must ensure that the parameters listed in Table 7 are notified to the CEO in accordance with the notification requirements of the table.

Table 7: Notification requirements

Condition or Table (if relevant)	Parameter	Notification requirement [1]
Condition 1 and Condition 21	Any failure or malfunction of any pollution control equipment (including leachate management infrastructure) or any incident, which has caused, is causing or may cause pollution.	As soon as practicable but no later than 5pm of the next usual working day.
-	Any: a) Unauthorised fire on the premises; or b) Accident, malfunction or emergency which could result in the discharge of fire-fighting washwater or wastes from the premises.	Notification in writing within 14 days of unauthorised fire.

Note 1: Notification requirements in the Licence do not negate the requirement to comply with s72 of the EP Act.

Specified actions

Infrastructure works

21. The licence holder must:

(a) design, install and construct the infrastructure;.

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

(c) at the corresponding infrastructure location; and

(d) within the corresponding timeframe,

as set out in Table 8.

Table 8: Design, construction, and installation requirements

Infrastructure		Design, construction, and installation requirements	Infrastructure location	Timeframe
1	Asbestos monocell	a) Constructed in accordance with specifications set out in Figure 5. b) Must have a depth of 4 m, with 1:2.5 (V:H) side-slopes and a cell footprint of 4,100 m^2. c) A 0.5 m high perimeter surface water bund must be constructed around the entirety of the cell.	'New Asbestos Area' as depicted in Schedule 1, Figure 2.	N/A
2	Tyre monocell	a) Constructed in accordance with specifications set out in Figure 4. b) Must have a depth of 6.6 m, with 1:2.5 (V:H) side-slopes and a cell footprint of 2,655 m^2.	'Tyre Monofil Area' as depicted in Schedule 1, Figure 2.	N/A

Infrastructure		Design, construction, and installation requirements	Infrastructure location	Timeframe
		c) Earthworks must be undertaken in compliance with AS 3798-2007. d) Excavated soil must be stored onsite for use as cover material. e) The floor must be evenly graded at a minimum 1 in 200 slope away from the active face to improve drainage and reworked with earth moving machinery with the addition of water to ensure that the compacted surface is free from tree roots or flow paths for leachate migration. f) The floor will be moisture conditioned and compacted to not less than 95% of the maximum dry density when tested in accordance with AS 1289-5.2.1. g) A 0.5 m high perimeter bund must be constructed to prevent surface water entering the cell.		
3	Category 64 Class II putrescible landfill trenches (x4)	a) Constructed according to the specifications and in the location specified in Figure 13 of Schedule 6; b) Each trench (cell) is constructed so the separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and c) Earthen bunds are constructed around the facility to divert stormwater away from the waste; d) Construction of stormwater management swales or drains; e) Each trench (cell) will have a 10m separation distance; f) Constructed with a 0.6 m thick compacted clay liner; g) Signage installed and clearly visible at the landfill identifying the following as a minimum; (i) wastes that may accepted; and (ii) wastes that are not to be accepted.	'Proposed Landfill Trench Area' as depicted in Schedule 1, Figure 2.	NA

Construction Compliance

22. The licence holder must within 30 days of each item of infrastructure required by condition 21 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 21; and

(b) prepare and submit to the CEO an audit report on that compliance.

23. The report required by condition 22 must include as a minimum the following:

(a) certification by the Site Manager that the items of infrastructure or component(s) thereof, as specified in condition 21, Table 8, have been

constructed/installed in accordance with the relevant requirements specified in that Table;

(b) installation survey data and a detailed site location for each item of infrastructure or component of infrastructure specified in condition 21;

(c) photographs of the constructed infrastructure; and

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

Definitions

In this licence, the terms in Table 9 have the meanings defined.

Table 9: Definitions

Term	Definition
ACM	means asbestos-containing material.
ACN	Australian Company Number.
annual period	a 12-month period commencing from 1 July until 30 June of the immediately following year.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
Asbestos Guidelines	means the *Guideline: Managing asbestos at construction and demolition waste recycling facilities* published by the Department.
asbestos	as defined in the Asbestos Guidelines.
ASLP	Australian Standard Leaching Procedure
AS 1289-5.2.1	means Australian Standard *AS 1289-5.2.1. Methods of testing soils for engineering purposes - Method 5.2.1: Soil compaction and density tests—Determination of the dry density/moisture content relation of a soil using modified compactive effort*.
AS 3798	means *Australian Standard AS 3798 Guidelines on earthworks for commercial and residential developments*.
AS/NZS 5667.1	means the Australian Standard *AS/NZS 5667.1 Water quality - Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*.
AS/NZS 5667.10	means the Australian Standard *AS/NZS 5667.10 Water quality - Sampling – Sampling guidance on sampling of waste waters*.
AS/NZS 5667.11	means the Australian Standard *AS/NZS 5667.11 Water quality - Sampling – Sampling guidance on sampling of groundwaters*.
Assessment and management of contaminated sites guideline	means the Department of Environment Regulation's *Assessment and management of contaminated sites Contaminated sites guidelines* December 2014.
BOD	biochemical oxygen demand
books	has the same meaning given to that term under the EP Act.

Term	Definition
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
clean fill	as defined in the Landfill Definitions.
condition	a condition to which the licence is subject under section 62 of the *Environmental Protection Act 1986*.
construction and demolition waste (C&D waste)	as defined in the Landfill Definitions.
Contaminated solid waste	means spadeable heterogenous or homogenous waste streams known, or suspected to be, contaminated with one or more of the contaminants listed in Table 4 of the Landfill Definitions.
Controlled Waste Regulations	Environmental Protection (Controlled Waste) Regulations 2004 (WA).
delivery vehicle	means the vehicle in which the waste material was delivered.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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.
E coli	*Escherichia coli*
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
green waste	means biodegradable waste comprising plants and their component parts such as flower cuttings, hedge trimmings, branches, grass, leaves, plants, seeds, shrub, and tree loppings, tree trunks, tree stumps and similar materials and includes any mixture of those materials.
HDPE	means high density polyethylene.

Term	Definition
HDPES PE100	means a version of HDPE with aa Minimum Required Strength (MRS) of 100 at 50 years and 20º according to ISO4427.
Household Hazardous Wastes	means the materials listed in Schedule 3: Household Hazardous Wastes, disposed of by occupiers of private residences; that is, not produced by industrial or other sources.
Inert Waste Type 1	as defined in the Landfill Definitions.
Inert Waste Type 2	as defined in the Landfill Definitions.
ISO 4427-1	means International Standard *ISO 4427-1 Plastics piping systems for water supply and for drainage and sewerage under pressure — Polyethylene (PE) - Part 1: General*
Landfill Definitions	*Landfill Waste Classification and Waste Definitions 1996*, as amended from time to time.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
neutralised acid sulfate soils	as defined in the Landfill Definitions
packaged	as defined in the *Environmental Protection (Controlled Waste) Regulations 2004* (as amended)
PFAS	per- and poly-fluoroalkyl substances
PFAS NEMP	means the PFAS National Environmental Management Plan Version 2.0- January 2020, published by the Australian Government: Department of Water and Environment
PFHxS	perfluorohexane sulfonate
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.

Term	Definition
relevant PFAS leachable concentration limits	means a sum of PFOS + PFHxS ASLP leachable concentration of less than 0.7 µg/L and a PFOA ASLP leachable concentration of less than 5.6 µg/L, when conducted at both pH 5 and using un-buffered reagent water.
relevant PFAS total concentration limits	means a sum of PFOS + PFHxS concentration of less than 50 mg/kg and a PFOA concentration of less than 50 mg/kg.
Special Waste Type 1	as defined in the Landfill Definitions.
strong wind conditions	means wind speeds of 38 km/hr or greater, or a Beaufort Scale rating of 6 or greater
TN	means total nitrogen
TP	means total phosphorus
TSS	means total suspended solids
Tyre monocell	means the designated area labelled as “Tyre monofill’ in the premises map for the burial of tyres and rubber waste only
white goods	means electrical goods such as fridges, freezers, washing machines and dryers that comprise of steel, plastic, and electrical/electronic components.
waste	has the same meaning given to that term under the EP Act.
waste type	means waste types identified in the Landfill Definitions and/or in Schedule 1 of the Controlled Waste Regulations (as applicable).

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

Figure 1: Map of the boundary of the prescribed premises

Premises layout

The premises layout is shown in the map below (Figure 2).

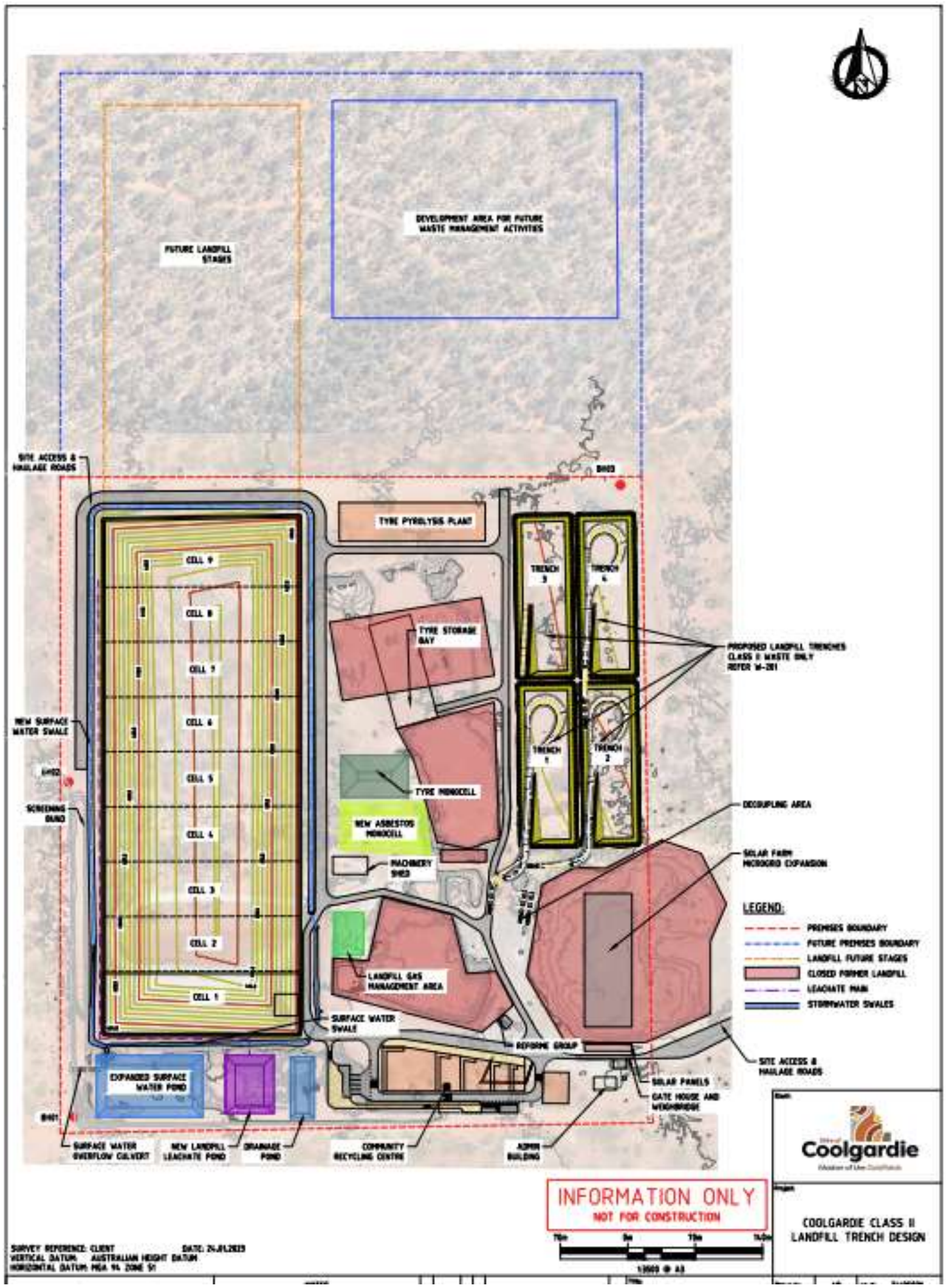


Figure 2: Premises layout

Surface water management

Infrastructure for the management of surface water is shown in the maps below (Figure 3 and Figure 4).

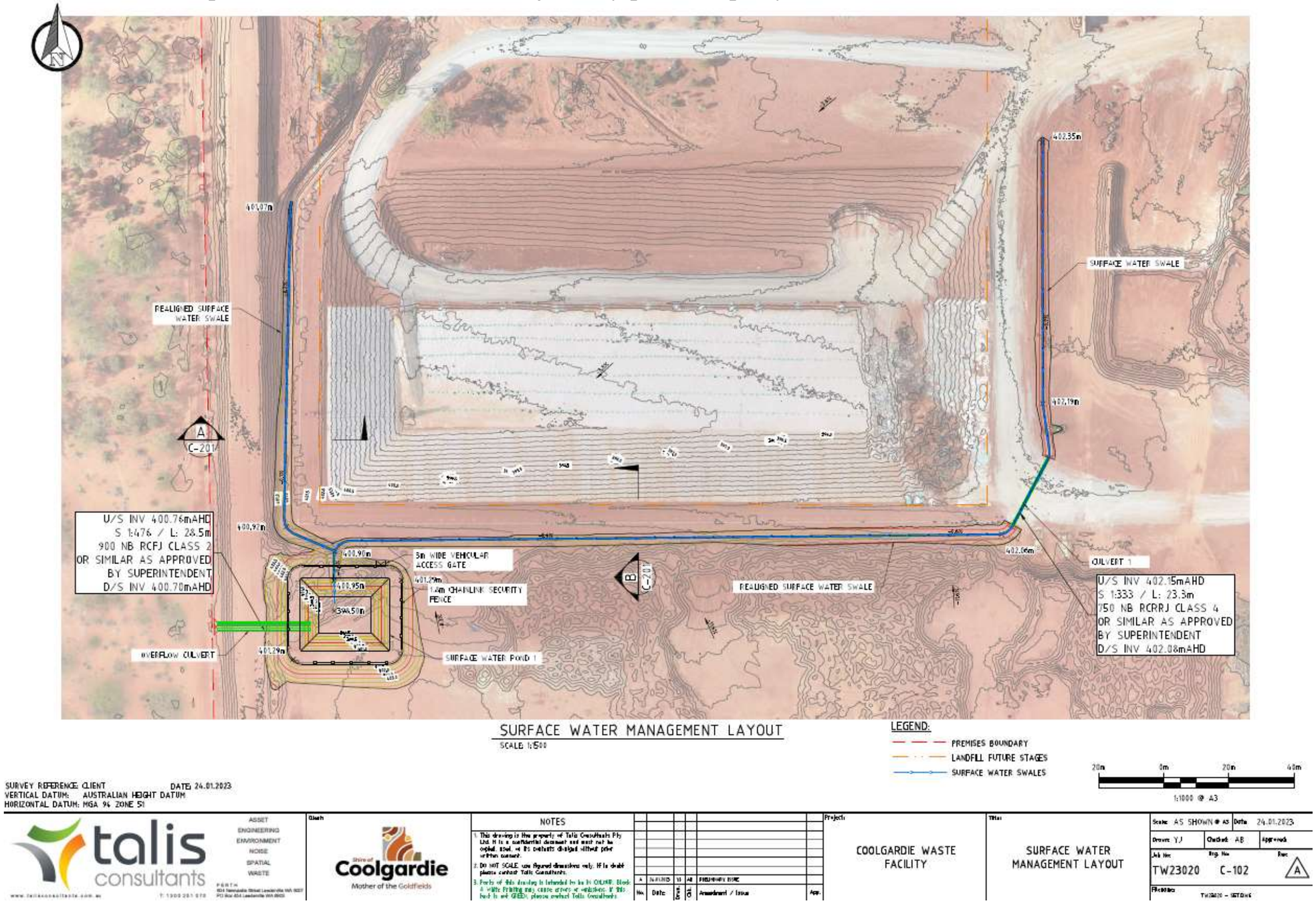
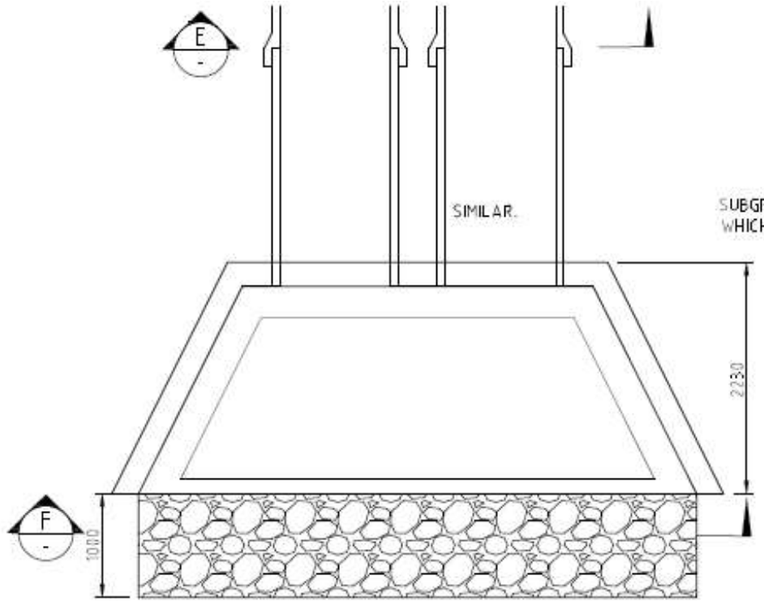
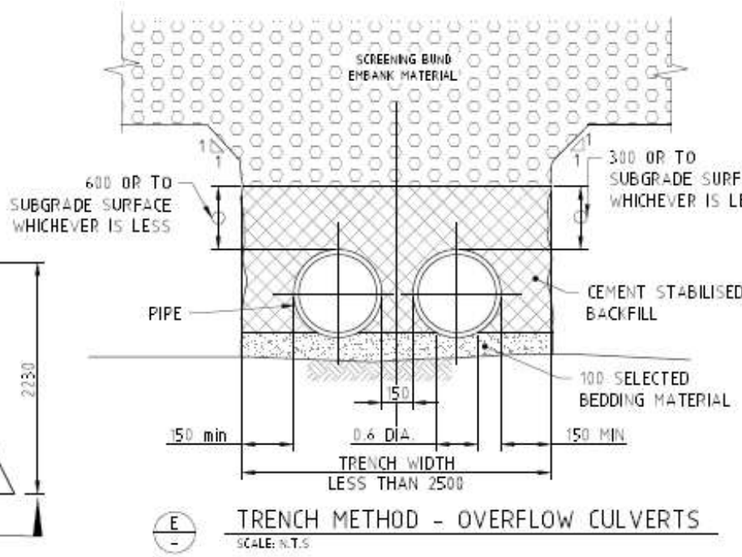


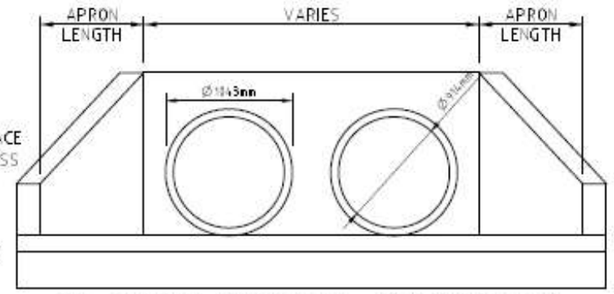
Figure 2: Surface water management.



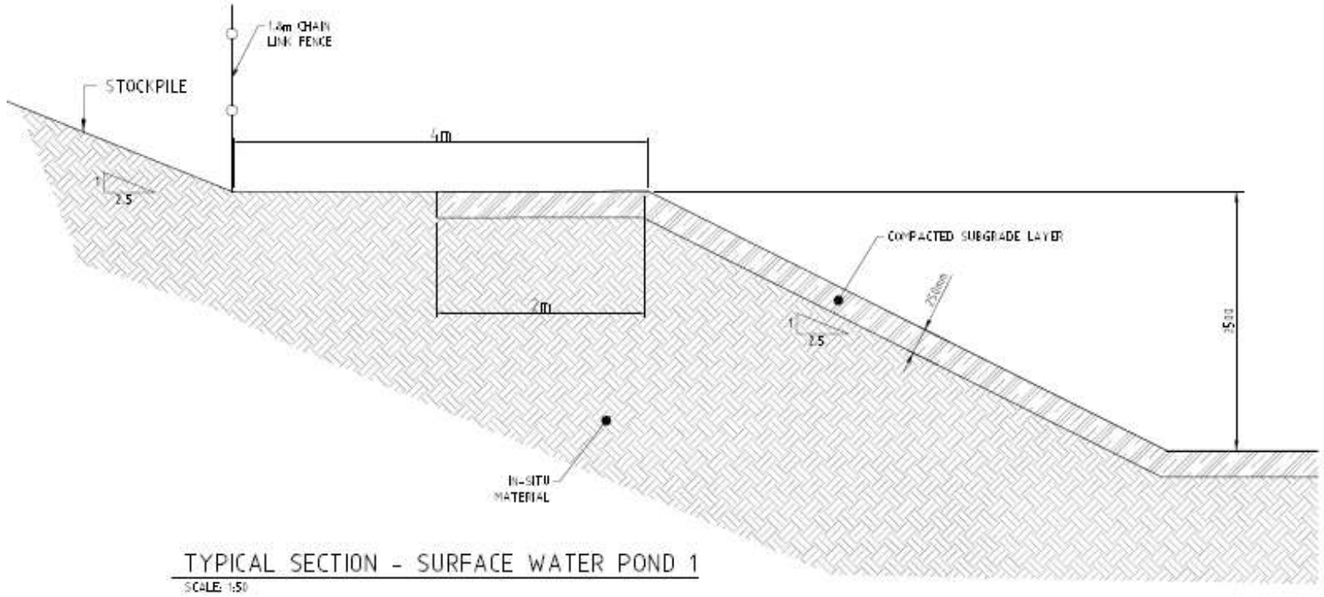
TYPICAL END STRUCTURE PLAN
SCALE: N.T.S



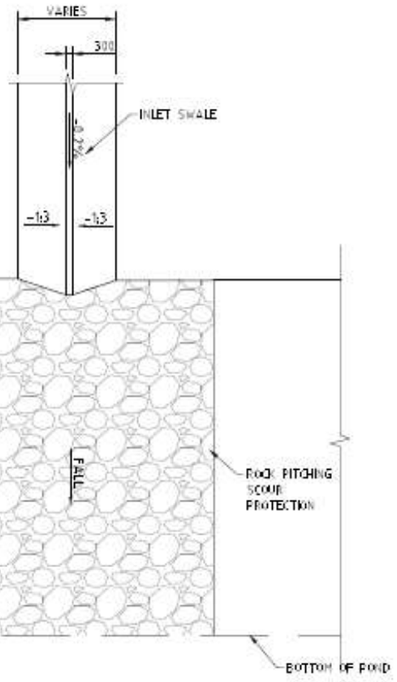
E
TRENCH METHOD - OVERFLOW CULVERTS
SCALE: N.T.S



F
TYPICAL ELEVATION - DOUBLE BARREL
SCALE: N.T.S



TYPICAL SECTION - SURFACE WATER POND 1
SCALE: 1:50



TYPICAL SECTION - POND INLET
SCALE: 1:50

talis consultants
ASSET
ENGINEERING
ENVIRONMENT
NOISE
SPATIAL
WASTE

Client: Shire of Coolgardie, Mother of the Goldfields

NOTES
1. This drawing is the property of Talis Consultants Pty Ltd. It is a confidential document and must not be copied, used or its contents divulged without prior written consent.
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No.	Date	Rev	Cht	Amendment / Issue	App.
A	24/01/25	VI	AB	PRELIMINARY ISSUE	

Project: COOLGARDIE WASTE FACILITY

Title: SURFACE WATER BASIN DETAILS

Scale: AS SHOWN @ A3	Date: 24.01.2025	
Drawn: YJ	Checked: AB	Approved:
Job No: TW23020	Dwg. No: C-303	Rev: A
File No:		

Figure 3: Surface water basin detail.

Tyre monocell

The tyre monocell is shown in the figure below (Figure 5).

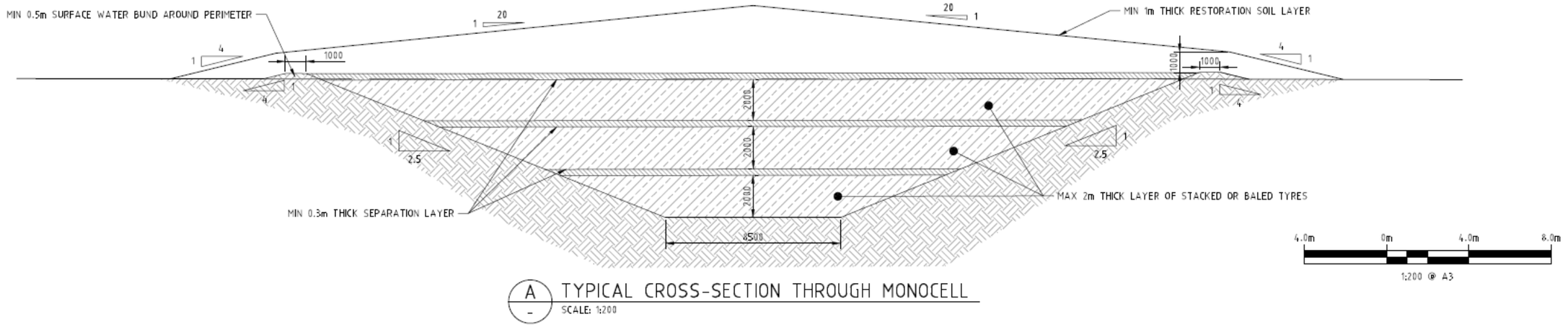

Figure 4: Tyre monocell.

Asbestos monocell

The asbestos monocell is shown in the figure below (Figure 6).

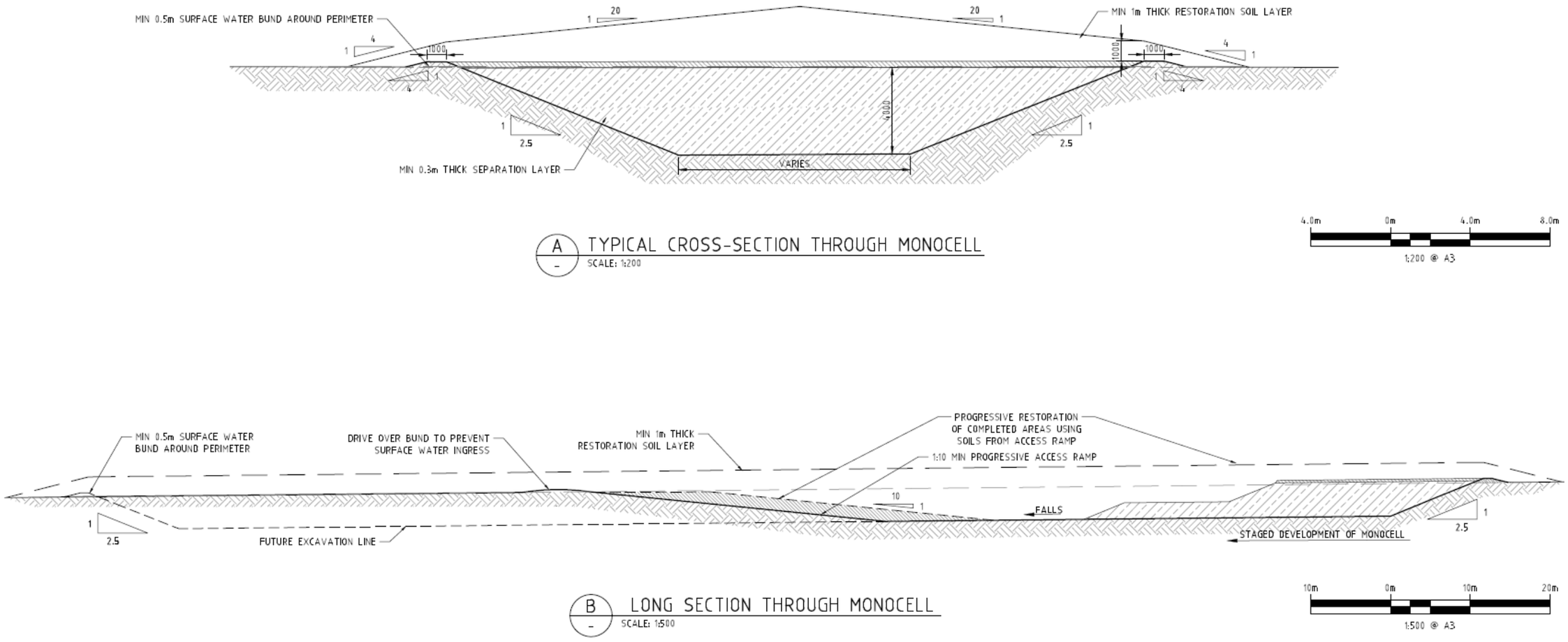

Figure 5: Asbestos monocell.

Landfill staging

Staging of the landfill cell is shown in the figure below (Figure 7).

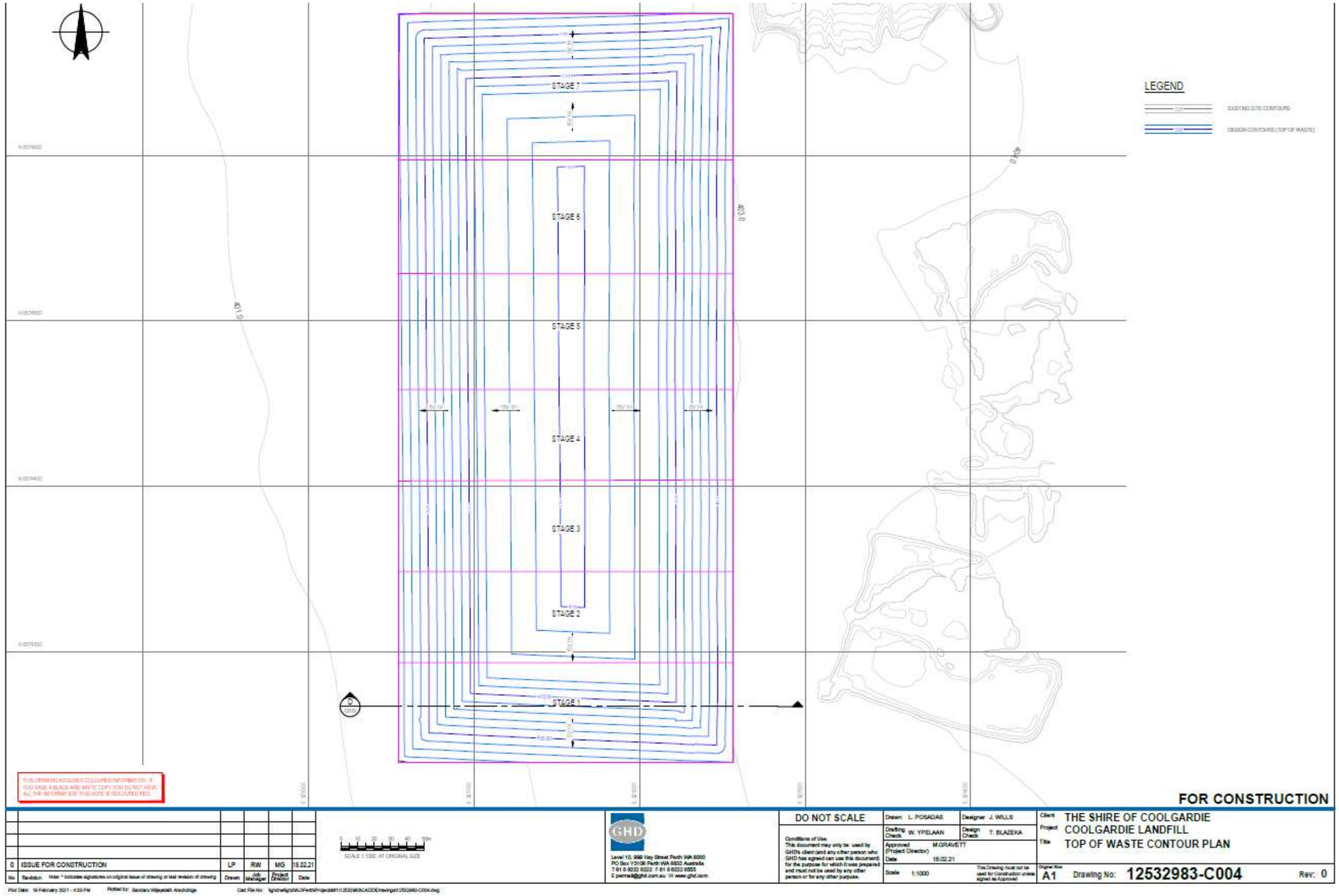

Figure 6: Landfill staging plan.

Monitoring locations

Groundwater, surface water and leachate monitoring locations are shown in the figure below (Figure 8).

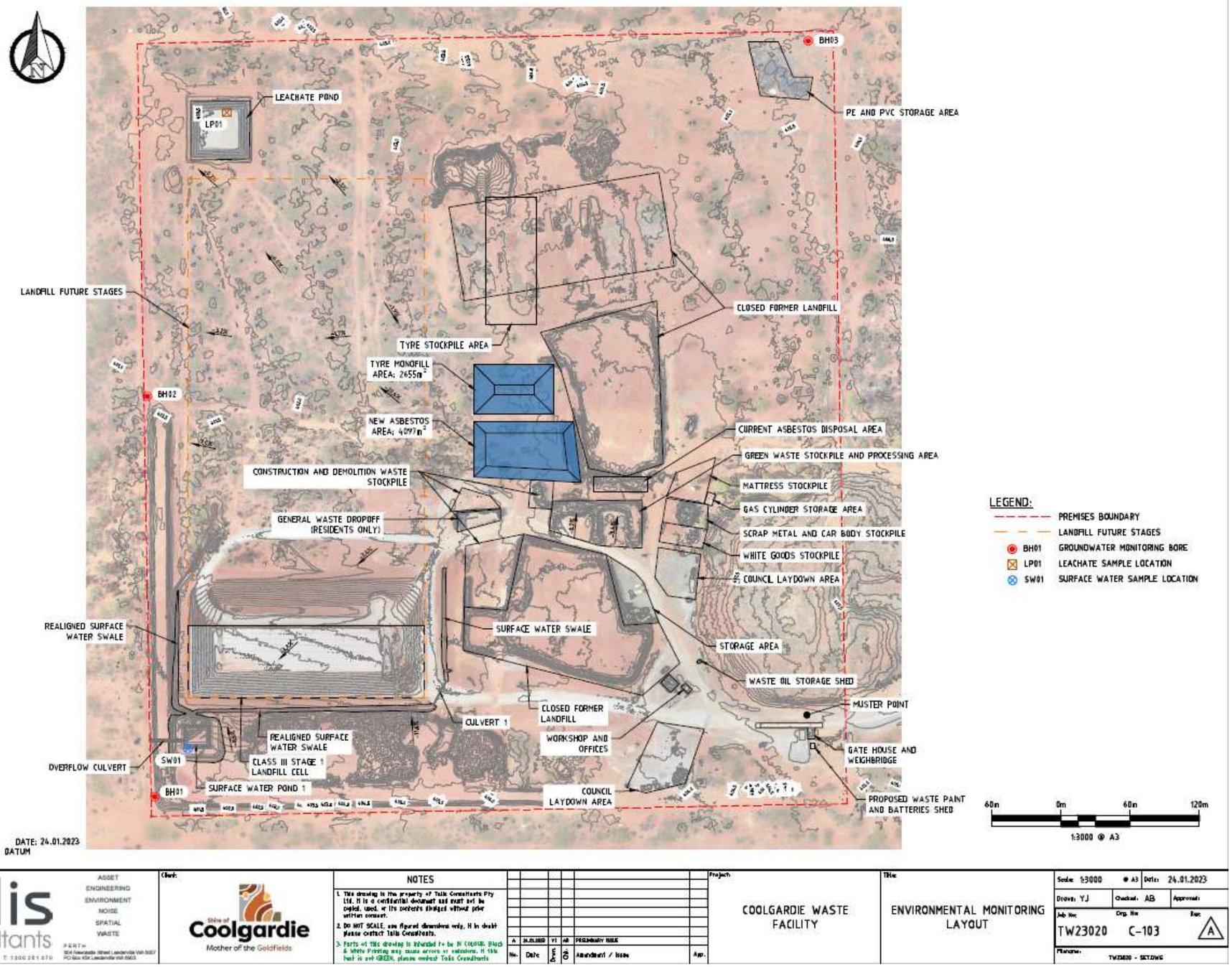

Figure 7: Environmental monitoring locations.

Schedule 2: List of coordinates

Premises boundary

The corners of the premises boundary are the coordinates listed in Table 10.

Table 10: Premises boundary coordinates (GDA2020)

	Easting	Northing	Zone
1.	321008	6574801	51
2.	321612	6574812	51
3.	321624	6574141	51
4.	321020	6574130	51

Groundwater monitoring bore locations

The locations of the groundwater monitoring bores are set out in Table 11 below.

Table 11: Groundwater monitoring bore locations (GDA1994 MGA Zone 51).

Bore ID	Easting (m)	Northing (m)	Screen depth (mbgl)	Purpose
BH01	321023	6574147	23.0 - 34.5	Hydraulically down gradient
BH02	321017	6574495	29.0 - 35.0	Hydraulically down gradient
BH03	321590	6574803	23.0 - 35.0	Hydraulically up gradient

Schedule 3: Household Hazardous Wastes

Acids
Aerosols – CFC based
Aerosols, flammable – paint and lacquers
Aerosols, flammable – pesticide
Alkalis
Arsenic based products
Batteries – household, dry cell
Cyanides
Engine coolants and glycols
Fire extinguishers – non-Halon
Flammable liquids – hydrocarbons and fuels
Flammable solids
Flares
Fluorescent tubes, compact fluorescent lights and light fittings
Gas cylinders – other
Gas cylinders – propane
General household chemicals e.g., cleaners
Heavy metal compounds
Inorganic oxidising agents – e.g., pool chlorine
Low level radioactive substances e.g., smoke detectors
Mercury – elemental
Organic peroxides
Paint – metal based
Paint – other, including isocyanates and amines
Paint – recyclable
Paint – solvent based, including resins and adhesives

Paint – water based
PCB materials
Pesticides – non-Schedule X
Pesticides – Schedule X
Solvents – halogenated
Toxics

Schedule 4: Monitoring

Groundwater monitoring

1. The licence holder must monitor the groundwater for concentrations of the identified parameters in accordance with Table 12.

Table 12: Monitoring of groundwater quality

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
Field measurements				
BH01, BH02 and BH03 (at the locations specified in Table 11)	Standing water level (SWL)[1, 2]	m AHD and mbgl	Quarterly	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.11
	pH[1]	pH units		
	Electrical conductivity[1]	µS/cm		
	Oxidation-reduction potential[1]	mV		
	Temperature[1]	°C		
	Dissolved oxygen[1]	mg/L		
General water quality parameters				
BH01, BH02 and BH03 (at the locations specified in Table 11)	Biochemical oxygen demand (BOD_5)	mg/L	Quarterly	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.11
	Total Dissolved Solids (TDS)			
	Total Organic Carbon (TOC)			
	Major Cations (Ca, Mg, Na, K)			
	Major Anions (Cl, SO_4, bicarbonate, carbonate)			
	Methane			
	Total phosphorus			
	Reactive phosphorus			
	Total Nitrogen			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
	Total Kjeldahl Nitrogen (TKN)			
	Nitrate + Nitrite- nitrogen			
	Ammonia-nitrogen			
Metals (dissolved)				
BH01, BH02 and BH03 (at the locations specified in Table 11)	Arsenic	mg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.11
	Chromium VI			
	Chromium (unspeciated)			
	Cadmium			
	Cobalt			
	Copper			
	Iron			
	Manganese			
	Mercury			
	Molybdenum			
	Nickel			
	Lead			
	Zinc			
Hydrocarbons				
BH01, BH02 and BH03 (at the locations specified in Table 11)	BTEX (benzene, toluene, ethylbenzene, xylene)	mg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.11
	Total recoverable hydrocarbons (TRH)			
	F1 TRH C6-C10			
	F2 TRH >C10-C16			
	F3 TRH >C16-C34			
	F4 TRH >C34-C40			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
Organochlorine pesticides (OCPs)				
	Aldrin	µg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.11
	Chlordane (and metabolites),			
	DDT (and metabolites)			
	Dieldrin			
	Chlorpyrifos			
	HCB			
	Heptachlor (and its epoxide)			
	Lindane			
Organophosphates (OPPs) and other potential contaminants				
BH01, BH02 and BH03 (at the locations specified in Table 11)	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Atrazine, TCE, PCE and polychlorinated biphenyls (total)			
PFAS compounds				
BH01, BH02 and BH03 (at the locations specified in Table 11)	Perflurooctane sulfonate (PFOS)	µg/L	Biannually	Spot sample in accordance with the requirements specified in the PFAS NEMP and AS/NZS 5667.11.
	Perfluorooctanoic acid (PFOA)			
	6:2 Fluorotelomer sulfonate (6:2 FtS)			
	8:2 Fluorotelomer sulfonate (8:2 FtS)			
	Perfluoroheptanoic acid (PFHpA)			
	Perfluorobutane sulfonate (PFBS)			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
	Perfluorobutanoic acid (PFBA)			
	Perfluorohexanoic acid (PFHxA)			
	Perfluorohexane sulfonate (PFHxS)			
	Perfluoropentanoic acid (PFPeA)			

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: SWL shall be determined prior to collection of other water samples.

Leachate and Surface Water Monitoring

2. The licence holder must monitor leachate and surface water for concentrations of the identified parameters in accordance with Table 13 Table

Table 13: Monitoring of surface water and leachate quality

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
Field parameters				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Water depth[1]	cm	Quarterly	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	pH[1]	pH units		
	Electrical conductivity[1]	µS/cm		
Water quality parameters				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Biochemical oxygen demand (BOD_5)	mg/L	Quarterly	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Total Dissolved Solids (TDS)			
	Total Organic Carbon (TOC)			
	Major Cations (Ca, Mg, Na, K)			
	Major Anions (Cl, SO_4, bicarbonate, carbonate)			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
	Total phosphorus			
	Reactive phosphorus			
	Total Nitrogen			
	Total Kjeldahl Nitrogen (TKN)			
	Nitrate + Nitrite- nitrogen			
	Ammonia-nitrogen			
Metals (total)				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Arsenic	mg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Chromium VI			
	Chromium (unspeciated)			
	Cadmium			
	Cobalt			
	Copper			
	Iron			
	Manganese			
	Mercury			
	Molybdenum			
	Nickel			
	Lead			
	Zinc			
Hydrocarbons				
LI01 an SW01 (as depicted in Schedule 1, Figure 7)	BTEX (benzene, toluene, ethylbenzene, xylene)	mg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Total recoverable hydrocarbons			
	F1 TRH C6-C10			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
	F2 TRH >C10-C16			
	F3 TRH >C16-C34			
	F4 TRH >C34-C40			
Organochlorine pesticides (OCPs)				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Aldrin	µg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Chlordane (and metabolites),			
	DDT (and metabolites)			
	Dieldrin			
	Chlorpyrifos			
	HCB			
	Heptachlor (and its epoxide)			
	Lindane			
Organophosphates (OPPs) and other potential contaminants				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Parathion, demeton-S-methyl, maldison, diazinon, demethoate, fenamiphos, fenthion	µg/L	Biannually	Spot sample in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	Atrazine, TCE, PCE and polychlorinated biphenyls (total)			
PFAS compounds				
LI01 and SW01 (as depicted in Schedule 1, Figure 7)	Perflurooctane sulfonate (PFOS)	µg/L	Biannually	Spot samples to be taken in accordance with the requirements specified in the PFAS NEMP and AS/NZS
	Perfluorooctanoic acid (PFOA)			
	6:2 Fluorotelomer sulfonate (6:2 FtS)			

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
	8:2 Fluorotelomer sulfonate (8:2 FtS)			5667.10
	Perfluoroheptanoic acid (PFHpA)			
	Perfluorobutane sulfonate (PFBS)			
	Perfluorobutanoic acid (PFBA)			
	Perfluorohexanoic acid (PFHxA)			
	Perfluorohexane sulfonate (PFHxs)			
	Perfluoropentanoic acid (PFPeA)			

Note 1: In-field non-NATA accredited analysis permitted.

Quality assurance and quality control requirements

3. The licence holder must adhere to the following field quality assurance and quality control procedures, as specified in Schedule B2 of the Assessment of Site Contamination NEPM, and must include as a minimum:

(a) decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;

(b) field instrument calibration for instruments used on site;

(c) blind replicate samples and rinsate blanks must be collected in the field and sent to the primary laboratory to determine the precision of the field sampling and laboratory analytical program;

(d) completed field monitoring sheets / sampling logs for each sample collected, showing:

i. time of collection;

ii. location of collection;

iii. initials of sampler;

iv. sampling method;

v. field analysis results;

vi. duplicate type / location (if relevant); and

vii. site observations and weather conditions, and

(e) chain-of-custody documentation must be completed which details the following information:

i. site identification;
ii. the sampler;
iii. nature of the sample;
iv. collection time and date;
v. analyses to be performed;
vi. sample preservation method;
vii. departure time from site;
viii. dispatch courier(s); and
ix. arrival time at the laboratory

Treated Effluent monitoring

4. The licence holder must monitor treated effluent for concentrations of the identified parameters in accordance with Table 14.

Table 14: Monitoring of treated effluent

Monitoring location	Parameter	Unit	Frequency	Sampling methodology
Treated Effluent				
Offtake discharge point	• pH • TP • TN • BOD; • TSS; • E.coli.	mg/L	Quarterly	Spot sample in accordance with AS/NZS 5667.10

Schedule 5: Tyre storage arrangements

Laced Storage - For Outdoor Storage Only - Tyres are stacked in an overlapping manner to create a woven or laced arrangement. This configuration helps limit fire spread as it reduces ability of burning tyres to fall and roll into unignited stock, figure 5.

Figure 8: Laced storage of tyres

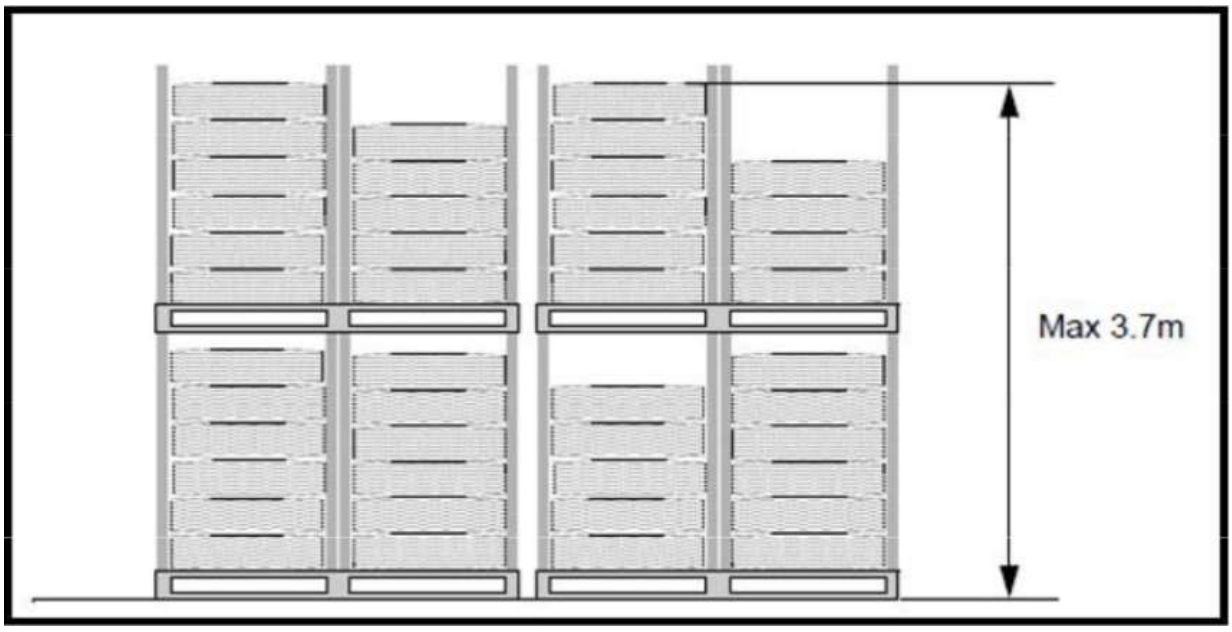

Figure 9: Maximum tyre stack height

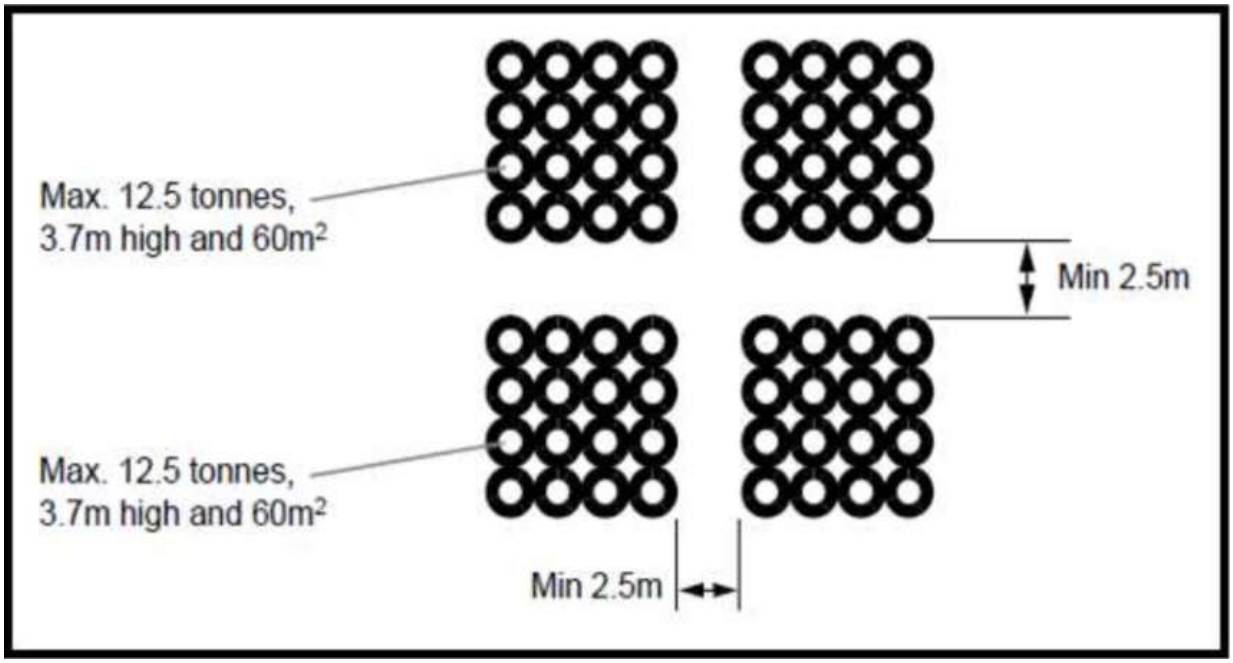

Figure 10: Minimum separation distance between four tyre stacks in one tyre pile

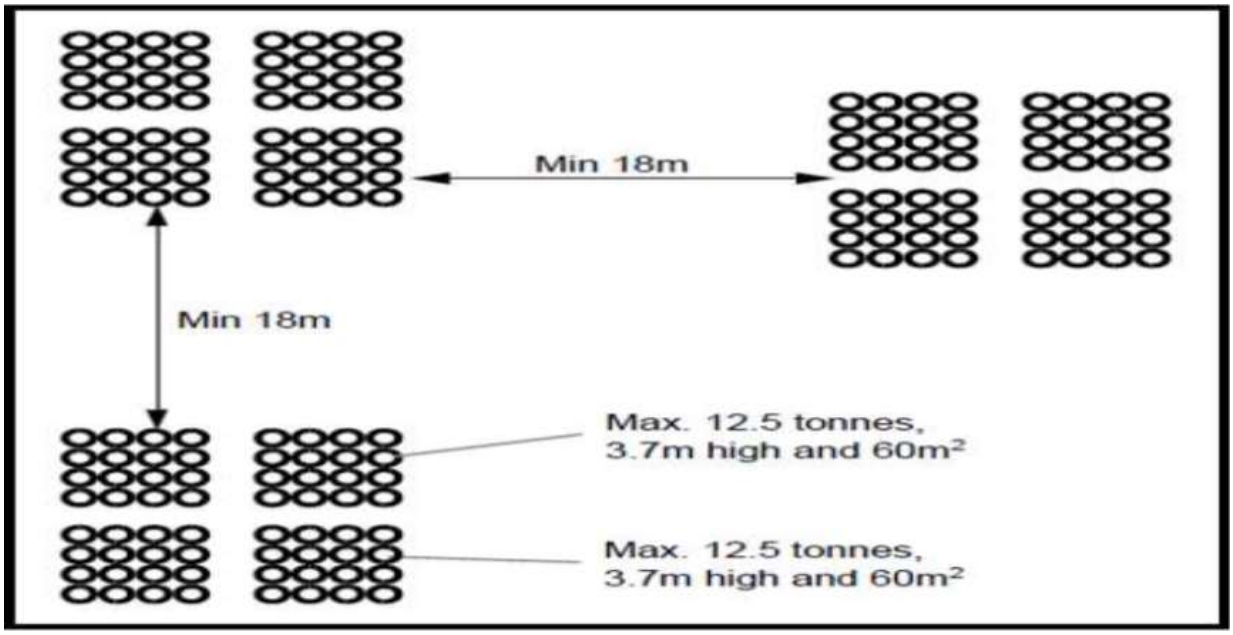

Figure 11: Minimum separation distance between tyre piles

Schedule 6: Class II Landfill Trenches- Drawings

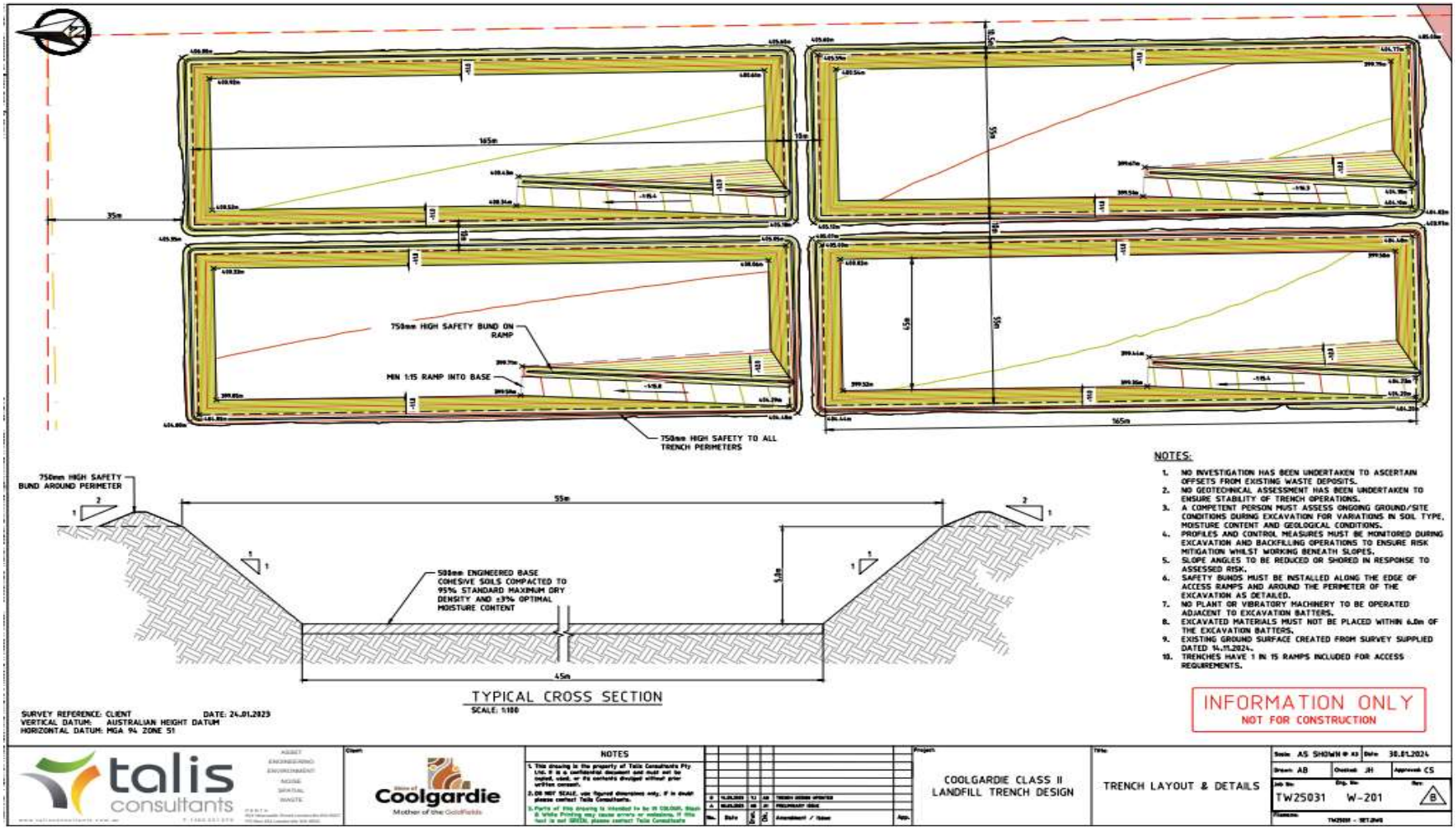

Figure 13: Class II Landfill Trench Design