Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8949/2016/2
Licence holder	Bunbury Harvey Regional Council
Registered business address	51 Stanley Road, Wellesley WA 6233
DWER file number	DER2016/000056-1~29
Duration	1/07/2022 to 30/06/2027
Date of amendment	01/09/2023
Premises details	Stanley Road Class II Putrescible Landfill Site 51 Stanley Road WELLESLEY WA 6233 Legal description - Lot 45 on Plan 17161 As defined by the coordinates in Schedule 4

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.	8,000 tyres 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.	5,000 tonnes per annual period
Category 62 – Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	66,000 tonnes per annual period
Category 64 – Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	100,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 1 September 2023, by:

Steve Checker

Digitally signed by Steve Checker
Date: 2023.09.01 18:47:55 +08'00'

Stephen Checker
A/SENIOR MANAGER, WASTE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
21 October 2016	L8949/2016/1	Licence amendment. Increase landfill footprint and premises throughout, update of monitoring conditions including storm water and landfill gas.
12 April 2018	L8949/2016/1	Amendment Notice 1: Addition of paint as an acceptable waste type.
1 May 2018	L8949/2016/1	Amendment Notice 3: Addition of Cell 1 and an additional 30,000 tonnes of waste for disposal.
8 May 2018	L8949/2016/1	Amendment Notice 2: Changes to clearing conditions.
19 December 2019	L8949/2016/1	Amendment to include construction of lined Cell 2/3 and amalgamate all previous amendments.
21 September 2020	L8949/2016/1	Amendment to facilitate acceptance of materials for the container deposit scheme.
19 April 2021	L8949/2016/1	Amendment to extend due date of Closure and Post Closure Management Plan from 31 December 2020 to 30 May 2021, re-add Category 13 conditions removed from the licence in error during previous amendment and correct tyre stockpiling conditions to reflect the correct limit of 100 tyres onsite.
29 September 2021	L8949/2016/1	Amendment for the inclusion of Category 57
27 June 2022	L8949/2016/2	Licence renewal application
1 September 2023	L8949/2016/2	Amendment to remove Category 13, amend tyre acceptance storage conditions, allow for the receipt and storage of putrescible waste on-site for up to 72 hours, increase hazardous waste throughput, increase waste oil throughput, allow for the acceptance of car batteries, electronic waste, and fridges, add category 61A to the licence for the storage and processing of green waste.

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:

Construction

Infrastructure and equipment

1. The Licence Holder must construct the infrastructure listed in Table 1, in accordance with the corresponding design and construction specifications.

Table 1: Infrastructure specifications

Infrastructure	Specifications (design and construction)
1. Cells 2 and 3 including landfill connection liner	(a) Located in the area depicted in Schedule 3, Figure 7; (b) Liner to be constructed of the layers as specified in Schedule 2 and depicted in Schedule 3, Figure 10; (c) Cell 2 to have a footprint area of 4.3 ha; and (d) Cell 3 to have a footprint area of 3.5 ha.
2. Leachate pond for Cells 2/3	(a) Located in the area depicted in Schedule 3, Figure 7; (b) To have a total volume of 5,700 $m^{3;}$ (c) To be constructed as depicted in Schedule 3, Figure 9; and (d) Liner to be constructed of the layers as specified in Schedule 2.
3. Stormwater Pond for Cells 2/3	(a) Located in the area depicted in Schedule 3, Figure 7; and (b) Liner to be constructed of the layers as specified in Schedule 2 and depicted in Schedule 3, Figure 8.
4. Green waste storage area	(a) Located in the area depicted in Schedule 1, Figure 1; (b) To have an impermeable base (permeability 1 x 10^{-9} m/s or less); (c) Designed to ensure that no ingress of stormwater runoff from outside of the hardstand occurs; and (d) To have a bund wall suitable to ensure that no runoff of contaminated water or fire waste water occurs.

2. The Licence Holder must ensure that the infrastructure and equipment specified in Table 2 is maintained in good working order and operated and maintained in accordance with the requirements specified in Table 2.

Table 2: General operational infrastructure

Infrastructure	Requirements
Stormwater ponds 1 as depicted in Schedule 1, Figure 1	(a) a freeboard of no less than 500 mm must be maintained within each stormwater pond; and (b) the liner of stormwater pond 1 must be kept free of leaks and defects.
Gabion wall	(a) structural integrity must be maintained
Aspiration wells	(a) maintained in accordance with Schedule 3, Figure 6; and (b) maintained to extract and passively vent, or be connected to an active landfill gas management systems capable of capture and combustion of landfill gas no later than 90 days following the completion of the capping works.
All monitoring infrastructure required by conditions 18 to 25	(a) maintained to ensure accessibility for monitoring; and (b) maintained to ensure it is fit for operational and monitoring purposes.

Compliance reporting

3. The Licence Holder must within 60 calendar days of an item of infrastructure required by condition 1 being constructed:

(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.

4. The Licence Holder must ensure the Environmental Compliance Report required by Condition 3:

(a) is certified by a suitably qualified Civil or Geotechnical Engineer confirming each item of infrastructure specified in Table 1 has been constructed with no material defects and to the specifications provided in that Table;

(b) documents how all CQA requirements set out in *Bunbury Harvey Regional Council Stanley Road Waste Management Facility Construction Works Quality Assurance (CQA) Plan, prepared by GreenTec Consulting dated 15 March 2019* have been met for items 1, 2 and 3;

(c) documents all repairs to subgrade and repairs resulting from non-destructive weld testing for Items 1 and 2;

(d) certifies that the subgrade and liner system are free from fault or defect, built to the design specifications (as detailed in Schedule 2) and fit for the intended purpose for Items 1 and 2;

(e) contains a detailed site plan showing the location and dimensions of site infrastructure;

(f) Is signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person within the company.

Premises Operation

Waste acceptance

5. The Licence Holder shall only accept waste on to the premises if:

(a) it is of a waste type listed in Table 3; and
(b) the quantity of the waste type accepted is below any quantity limit listed in Table 3; and
(c) the waste type meets any specification listed in Table 3.

Table 3: Waste acceptance

Waste type	Quantity limit per year	Specification[1]
Clean fill	N/A	N/A
Inert Waste Type 1	10,000 tonnes	Inert Waste Type 1 to a maximum size of 300mm accepted for storage and recycling/reuse only
Approved CDS materials	20,000 tonnes	Approved CDS materials only.
Hazardous Waste	100 tonnes	Acids Aerosols – CFC based Aerosols, flammable – paint and lacquers Aerosols, flammable - pesticide Alkali 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, CFL and light fittings Gas cylinders – other Gas cylinders – propane General household chemicals eg cleaners Heavy metal compounds Inorganic oxidising agents – eg pool chlorine Low level radioactive substances eg smoke detectors Mercury – elemental Organic peroxides Paint – metal based Paint – other, including isocyanates and amines

Waste type	Quantity limit per year	Specification[1]
		Paint – recyclable Paint – solvent based, including resins and adhesives Paint – water based PCB materials Pesticides – non Schedule X Pesticides – Schedule X Solvents – halogenated Toxics
Hazardous Waste – Used agricultural chemical containers		Used agricultural chemical containers
Hazardous Waste – Used batteries	30 tonnes	Used lead acid batteries
Waste oil	25 tonnes	N/A
Putrescible	15,000	Municipal waste and local council generated waste Wood waste, cardboard, green waste and furniture.
Inert Waste Type 2 - Tyres	8,000 tyres /year	N/A
Green waste	5,000 tonnes	Limited to lawn clippings, leaves, plants, bark, branches, tree trunks and stumps. Excludes material from source-separated kerbside municipal collections of designated garden organics (GO) bins.
Scrap Metal	20,000 tonnes	Scrap metal accepted for storage and recycling/ reuse. Whitegoods limited to fridges, freezers and air conditioners. Car bodies must not be accepted
E-waste	80 tonnes	Electronic, electrical and battery-powered items that have been discarded or no longer in working order

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.
Note 2: Additional requirements for the acceptance, handling and storage of dangerous goods are set out in the *Dangerous Goods Safety Act 2004* codes of practice.
Note 3: Additional requirements for the acceptance, handling and storage of hazardous waste may apply under the Household Hazardous Waste (HHW) Program and Paintback Scheme.

6. The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 5 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 72 hours of the delivery.

Waste processing

7. The Licence Holder shall ensure that wastes accepted onto the premises are only subjected to the processes set out in Table 4 and in accordance with any process limits described in that Table.

Table 4: Waste processing

Waste type(s)	Process	Process limits~~-~~[1]
Inert Waste Type 1	Receipt, handling, storage prior to reuse or offsite disposal	(a) Only to be stored in the dedicated storage area depicted in Schedule 1, Figure 2; and (b) No more than 200 tonnes can be stored at the premises at any one time.
Scrap metal (ferrous and non-ferrous)	Receipt, handling, storage prior to offsite disposal	(a) Only to be stored in the dedicated storage area depicted in Schedule 1, Figure 2; (b) Shall not be stored on the site for longer than 90 days; and (c) Must be sent to an appropriately licensed facility for the processing of such waste.
Electronic waste	Receipt, handling, storage prior to offsite disposal	(a) Only to be stored in the transfer station area as depicted in Schedule 1, Figure 3; (b) Must be accepted and stored in accordance with the requirements of AS/NZS 5377:2013; and (c) Must be sent to an appropriately licensed facility for the processing of such waste.
Inert Waste Type 2 - Tyres	Receipt, handling, storage prior to offsite disposal~~-~~	(a) Tyres must be stored in a dedicate skip bin located within the transfer station area depicted in Schedule 1, Figure 3; (b) No more than 350 tyre units to be stored onsite at any time; and (c) Must be sent to an appropriately licensed facility.

Waste type(s)	Process	Process limits ~~1~~
Putrescible Waste - Municipal solid waste	Receipt, handling, storage prior to offsite disposal	(a) Only to be received via the transfer station and stored in a 30m^3 skip bin as depicted in Schedule 1, Figure 3; (b) Only to be stored and sorted on a hardstand area bunded to prevent run-off; (c) Only small quantities (up to 20 tonnes) of waste are permitted to remain in covered skip bins over weekends. All other waste is not to remain on the premises for more than 24 hours from time of receival; (d) Bins stored on site for more than 24 hours mut be covered with an impermeable tarpaulin as soon as practicable and no later than the end of the working day that the waste was deposited; and (e) Must be sent to an appropriately licensed facility for disposal.
Putrescible Waste – Mattresses	Receipt, handling, storage prior to offsite disposal	(a) Only to be stored in the transfer station area as depicted in Schedule 3, Figure 3; (b) Stored in accordance with the below specifications: i. Stockpiles must contain no more than 10 mattresses; ii. No more than 10 stockpiles must be stored at any one time. (c) Must not be processed on the premises; (d) Shall not be stored on the site for longer than 28 days; and (e) Must be sent to an appropriately facility for recycling or disposal.
Hazardous waste	Receipt, handling, storage prior to offsite disposal	(a) Hazardous wastes (excluding paint) shall be stored in dedicated impermeable bunded and covered storage area as depicted in Schedule 1, Figure 3; (b) Paint shall be stored in dedicated storage containers (‘stillages’); (c) Used lead acid batteries must be stored in a self bunded and covered battery storage container; (d) Only to be stored and sorted within the transfer station area; (e) Shall not be decanted or treated at the premises; (f) Shall not be stored on the site for longer than 90 days; and (g) Must be sent to an appropriately licensed facility.

Waste type(s)	Process	Process limits [1]
Green waste	Receipt, handling, storage and processing (shredding) prior to reuse on site or transfer offsite	(a) Green waste shall not be burned; (b) Processing (shredding) and storage of green waste restricted to the dedicated green waste storage area as depicted in Schedule 1, Figure 2; (c) Stored in accordance with the below specifications: i. Stockpiles/windrows must be no larger than 50 m long, 10 m wide and 5 m high. ii. Stockpiles/windrows must be separated by at least 10 m of clear ground and clear of any combustible material. iii. No greater than 3 stockpiles must be stored at any one time. iii. A 75 m buffer zone containing a fuel load below 4 tonnes per hectare must be maintained at all times. (d) Regularly monitor temperature and moisture content to ensure: i. temperatures within stockpiles/windrows are maintained below 75ºC. ii. moisture content of materials undergoing mechanical processing and products is maintained at less than 20 per cent or greater than 45 per cent. (e) Must be reused on site or transferred offsite
Waste oil	Receipt, handling and removal offsite	(a) Contained within a self-bunded tank or tank located within the transfer station area as depicted in Schedule 1, Figure 3; (b) Must not be processed or treated onsite; (c) Shall not be stored on the site for longer than 28 days; and (d) Must be sent to an appropriately licensed facility.
Approved CDS materials	Receipt, handling and removal offsite	(a) Shall only take place within the CDS area shown in Schedule 1, Figure 2; and (b) Must be sent to an appropriately licensed facility.

Note 1: 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*.

Note 2: Additional requirements for the acceptance, handling and storage of dangerous goods are set out in the *Dangerous Goods Safety Act 2004* codes of practice.

Note 3: Additional requirements for the acceptance, handling and storage of hazardous waste may apply under the Household Hazardous Waste (HHW) Program and Paintback Scheme.

Fencing

8. The Licence Holder shall implement the following security measures at the site:
   (a) erect and maintain suitable fencing to prevent unauthorised access to the site;
   (b) ensure that any entrance gates to the premises are securely locked when the premises are unattended; and
   (c) undertake regular inspections of all security measures and repair damage as soon as practicable.

9. The Licence Holder shall install and maintain a sign at the entrance to the premises which clearly displays the following information;
   (a) hours of operation;
   (b) contact telephone number;
   (c) warning indicating penalties for people lighting fires; and
   (d) list of materials accepted for recycling and the location of where they can be deposited on the premises.

10. The Licence Holder shall implement control measures to prevent infestations of pests, flies and vermin at the premises including baiting and trapping being undertaken every 4 months.

11. The Licence Holder shall take all reasonable and practical measures to ensure that no windblown waste escapes from the premises and that windblown waste is collected on at least a weekly basis and appropriately contained.

12. The Licence Holder shall ensure that no waste is burnt on the premises.

13. The Licence Holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated and being discharged beyond the boundary of the premises.

14. The Licence Holder must immediately recover any spills of residual liquids from approved CDS materials.

15. The Licence Holder must ensure that any accumulated liquids, and residues from the recovery of spills from approved CDS materials, are stored in an impervious container prior to disposal at an appropriately authorised facility.

Fire and emergency management

16. The Licence Holder must:

(a) ensure that firefighting equipment and systems are in good working order and capable of controlling a loose material fire; and

(b) ensure that any unauthorised fire on the premises is extinguished as soon as possible;

17. The Licence Holder must by 1 March 2024 prepare and implement a Fire and Emergency Management Plan that is consistent with Australian Standard AS3745. The plan must include, but is not limited to:

(a) notification procedures for fire and major spill incidents;

(b) how fires will be prevented, detected, responded to, suppressed, contained and controlled for all approved activities addressing all waste types and for all stages of the waste handling, sorting and processing;

(c) in the event of a fire occurring at the premises, how impacts to the environment and human health will be mitigated;

(d) how staff will be trained in fire and emergency response on an ongoing, annual basis;

(e) details on the firefighting equipment in place and/or accessible at the premises and the fire response capabilities and responsibilities;

(f) a premises map displayed at the front of the premises depicting an after-hours contact details, plus the location and layout of:

(i) fire hose reels, hydrants and isolation points;

(ii) electrical isolation points; and

(iii) fire response access points to the premises;

(g) hazmat manifest displayed at front of the premises;

(h) ensure that pollution control equipment be available on site, sufficient to divert run-off from, or prevent drainage into stormwater drains;

(i) ensure that pollution control equipment listed is deployed, when possible and safe to do so, in the event of a fire; and

(j) ensure that any water generated from fire-fighting activities is removed from the premises by a carrier licensed under the *Environmental Protection (Controlled Waste) Regulations 2004*.

Monitoring

18. The Licence Holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

19. The Licence Holder must ensure that:

(a) quarterly monitoring is undertaken at least 45 days apart; and

(b) annual monitoring is undertaken at least 9 months apart.

20. The Licence Holder must ensure that all monitoring equipment used on the premises is to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

21. The Licence Holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Monitoring of inputs and outputs

22. The Licence Holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Monitoring of inputs and outputs

Input Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	As specified in Table 3	tonnes	N/A	Each load arriving at the premises
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the premises

Monitoring of produced Landfill Gas

23. The Licence Holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of produced landfill gas

Monitoring point reference	Parameter	Units	Averaging period	Frequency
In-cell landfill gas aspiration	Volumetric flow rate	L/hr m^3/day	Instantaneous and spot sample	Monthly

Monitoring point reference	Parameter	Units	Averaging period	Frequency
wells	Methane	Volume %		
	Carbon dioxide	Volume %		
	Oxygen	Volume %		

Process monitoring

24. The Licence Holder shall undertake the process monitoring requirements outlined in Table 7 in accordance with the specifications outlined in that table.

Table 7: Process monitoring requirements

Monitoring point	Process description	Parameter	Unit	Frequency	Method
Green waste stockpiles/windrows	Shredding and storage of green wastes	Internal temperature	°C	At least two times per week	None specified
		Moisture content	%	Weekly	None specified

Ambient environmental quality monitoring

25. The Licence Holder must undertake the monitoring in Table 8, Table 9 and Table 10 according to the specifications in those tables.

Table 8: Monitoring of ambient surface water quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Stormwater pond 1 as depicted in Figure 1, Schedule 1	pH[1]	None specified	Spot sample	Two sampling events between the months of June and September separated by at least 30 days
	Electrical conductivity[1]	µS/cm		
	Metals: Arsenic (total), cadmium, chromium, copper, iron (total), lead, manganese, mercury, molybdenum, nickel, selenium, zinc	mg/L		
	Nutrients: Ammoniacal nitrogen, nitrate-nitrogen, total nitrogen, total phosphorus			

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
	Cations and anions: Total potassium, chloride and sulfate			
	Total soluble solids, total organic carbon and chemical oxygen demand			

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

Table 9: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
GQ1S,GQ1D, GQ2S,GQ2D, GQ3S,GQ3D, GQ4S,GQ4D, GQ5S,GQ5D, GQ6S,GQ6D, GQ7S,GQ7D, GQ8S,GQ8D, GQ9S,GQ9D, GQ10S,GQ10D GQ11S,GQ11D, GQ12S,GQ12D, GQ13S,GQ13D, GQ14S,GQ14D, GQ15S,GQ15D, GQ16D, GQ17S,GQ17D, GQ18S,GQ18D, GQ19 as depicted in the Map of groundwater monitoring points in Schedule 1, Figure 5	Standing water level[1]	m(AHD)	Spot sample	Quarterly
	pH[1]	-		
	Electrical conductivity[1]	µS/cm		
	Redox potential[1]	Eh		
	Chemical oxygen demand	mg/L		
	Nitrate-nitrogen			
	Ammonia-nitrogen			
	Total Nitrogen			
	Total Phosphorus			
	Total dissolved solids			
	Total organic carbon			
	Dissolved oxygen[1]			
	Dissolved methane			
	Major cations and anions: calcium, magnesium, potassium, sodium, chloride, bicarbonate and sulphate			
	Heavy Metals: Aluminium, Arsenic, Cadmium, Chromium, Copper, Iron (total) Lead, Manganese, Mercury, Nickel, Selenium and Zinc			
	Organics: Phenols, Polyaromatic hydrocarbons (PAH), Organochlorine pesticides, Organophosphate pesticides (Demeton-S-Methyl, Diazinon, Dimethoate, Fenamiphos, Fenthion, Malathion and Parathion), Polychlorinated biphenyls (PCB), Atrazine, BTEX (benzene, toluene, ethylbenzene, xylenes), Total Petroleum Hydrocarbons and Trichloroethylene/ Perchloroethylene			Annual

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

Table 10: Monitoring of ambient landfill gas

Monitoring point reference	Parameter	Units	Averaging period	Frequency
Perimeter landfill gas monitoring wells	Volumetric flow rate	L/hr m^3/day	Instantaneous and spot sample	Six monthly
	Methane	Volume %		
	Carbon dioxide	Volume %		
	Oxygen	Volume %		

Records and reporting

26. 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 1 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 2 of this licence;

(d) monitoring programmes undertaken in accordance with conditions 22, 23, 24 and 25 of this licence; and

(e) complaints received under condition 28 of this licence.

27. The books specified under condition 26 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.

28. 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.

29. 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 no later than 31 March each year

30. The Licence Holder must submit to the CEO by no later than 31 March each year, an Annual Environmental Report for that annual period for the conditions listed in Table 11, and which provides information in accordance with the corresponding requirement set out in that table.

Table 11: Annual Environmental Report

Condition	Requirement
-	Summary of any limit exceeded.
Condition 22 Table 5	Volume of waste accepted/rejected for each waste type which must include: (a) data in a table format for the annual period; (b) comment on annual input and output volumetric trends; (c) the volumetric tonnage conversion rates used for each waste type; and (d) if rejected, the length of time that the waste was stored on the site for.
Condition 23 Table 6	Monitoring of ambient landfill gas which must include: (a) data in a table format for the annual period; and
Condition 24 Table 7	Process monitoring of green waste stockpiles/windrows which must include: (a) data in a table format for the annual period; (b) comment on annual input and output volumetric trends; and (c) the volumetric tonnage conversion rates used for green waste.
Condition 25 Table 8	Monitoring of ambient stormwater quality which must include: (a) data in a table format for the annual period; and (b) data in graphical format for trend analysis to include at least the last four years data where available.
Condition 25 Table 9	Monitoring of ambient groundwater quality which must include: (a) data in a table format for the annual period; and (b) data in graphical format for trend analysis to include at least the last four years data where available.
Condition 25 Table 10	Monitoring of ambient landfill gas which must include: (a) data in a table format for the annual period; and (b) data in graphical format for trend analysis to include at least the last four years data where available.
Condition 28	Complaints summary

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
Acceptance Criteria	has the meaning defined in the Landfill Definitions
ACM	means asbestos containing material and has the meaning defined in the Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites, Western Australia, (DOH, 2009)
ACN	Australian Company Number
AHD	Means the Australian height datum
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
Annual Period	means a 12-month period commencing from 1 January to 31 December in the same year.
Approved CDS materials	Means the register of products that have been approved by the Department of Water and Environmental Regulation in accordance with Division 3 of the *Waste Avoidance and Resource Recovery (Container Deposit Scheme) Regulations 2019*
Asbestos	means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysolite, crocidolite, tremolite and any mixture containing 2 or more of those
Asbestos fibres	has the meaning defined in the document Department of Health 2009, *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Site in Western Australia*, Government of Western Australia
AS1289	Means the Australian Standard *Methods of testing soils for engineering purposes*
AS3706.06	Means the Australian Standard Geotextiles – Methods of Test Determination of seam strength
AS3745-2010	Means the Australia Standard AS3745-2-10 *Planning for emergencies in facilities.*
AS/NZS 4130	Means the Australia Standard/NZS 4130 *Polyethylene (PE) pipes for pressure applications*
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*
Books	has the same meaning given to that term under the EP Act.

Term	Definition
Condition	means a condition to which this Licence is subject under s.62 of 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
Clean Fill	has the meaning defined in the Landfill Definitions
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Controlled Waste	has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;
CQA	means construction quality assurance
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.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
E-waste	means electronic, electrical and battery-powered items that have been discarded or no longer in working order. Covers a range of items used in commercial, industrial and residential premises and includes, but is not limited to, televisions, computers, mobile phones, kitchen appliances and white goods
EP Act	means the *Environmental Protection Act 1986* (WA).

Term	Definition
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
Fill	means material used to increase the ground level or fill a hollow.
Hazardous Waste	has the meaning defined in the Landfill Definitions
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions
Inert Waste Type 2	has the meaning defined in the Landfill Definitions
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill Definitions	means the document titled “Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)” published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time
Landfill gas aspiration well	refers to in-cell pipework for venting and extraction of landfill gas.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
Perimeter landfill gas monitoring well	refers to ambient landfill gas monitoring points
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the prescribed premises activities listed on the front of this Licence

Term	Definition
Quarantined storage area or container	means a hardstand storage area or sealed-bottom container that is separate and isolated from authorised waste disposal areas and is capable of containing all non-conforming waste and its constituents, these areas must be clearly marked, and their access restricted to authorised personnel.
Quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in the same year.
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken
Suitably Licensed Premises	means a premises that holds an active authorisation under Part V, Division 3 of the EP Act to accept that waste type.
Suitably qualified Civil or Geotechnical 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 geotechnical engineering; and (c) is employed by an independent third party external to the Licence Holder's business; or is otherwise approved in writing by the CEO to act in this capacity.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
Waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Prescribed premises boundary

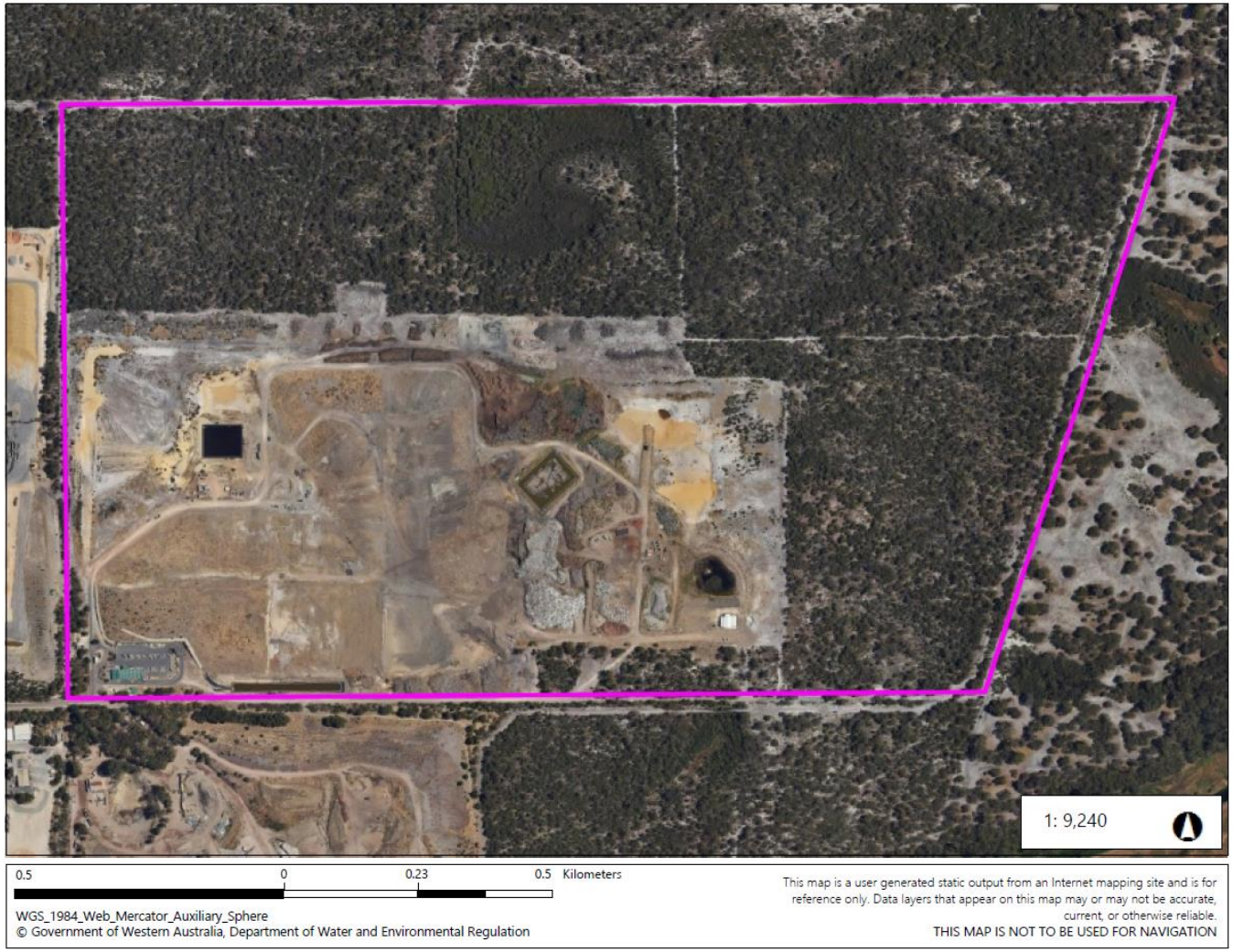


Figure 1: Premises layout map

Premises layout

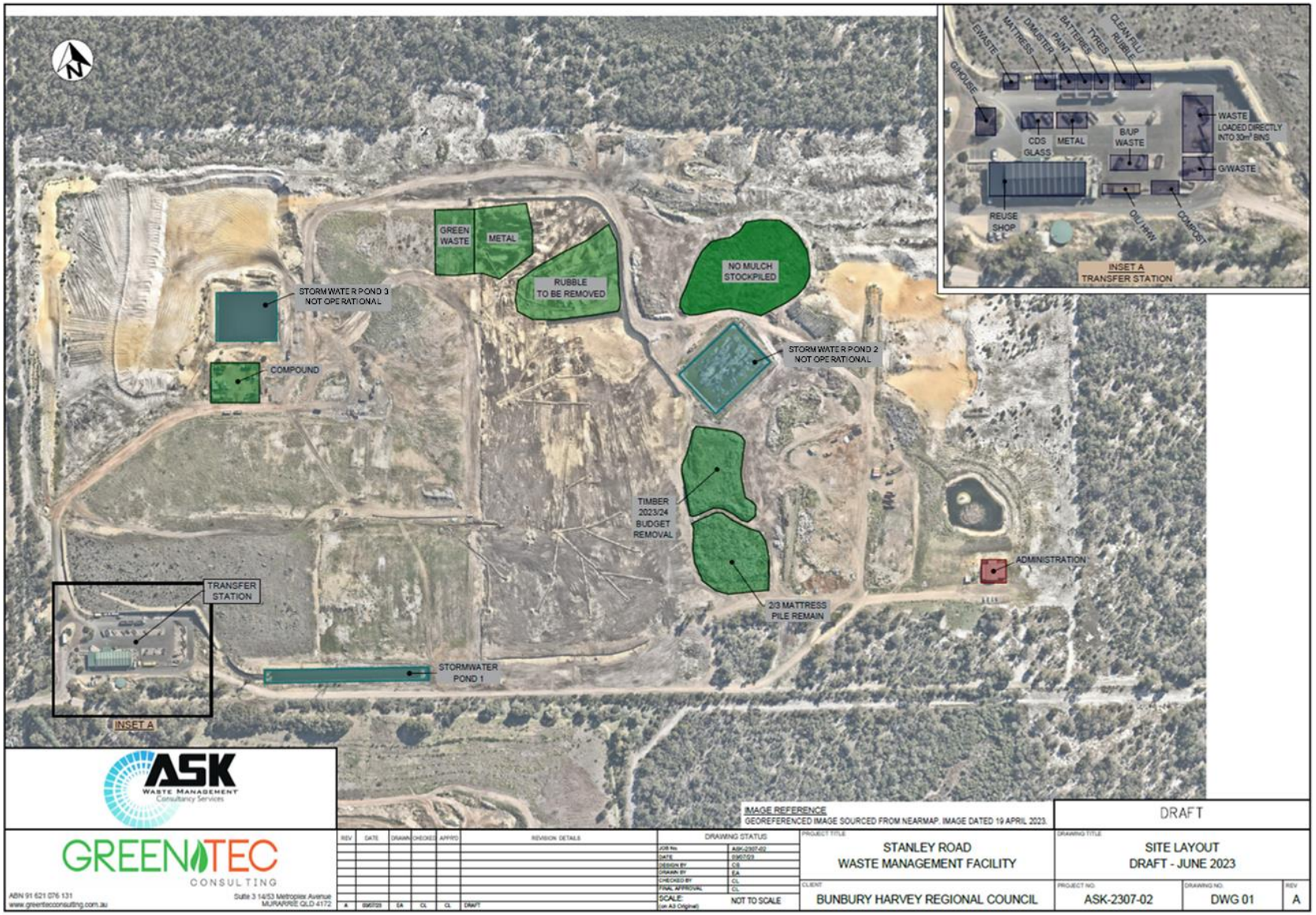


Figure 2: Premises layout map

Transfer Station layout

Figure 3: Transfer station layout map

Approved CDS area layout

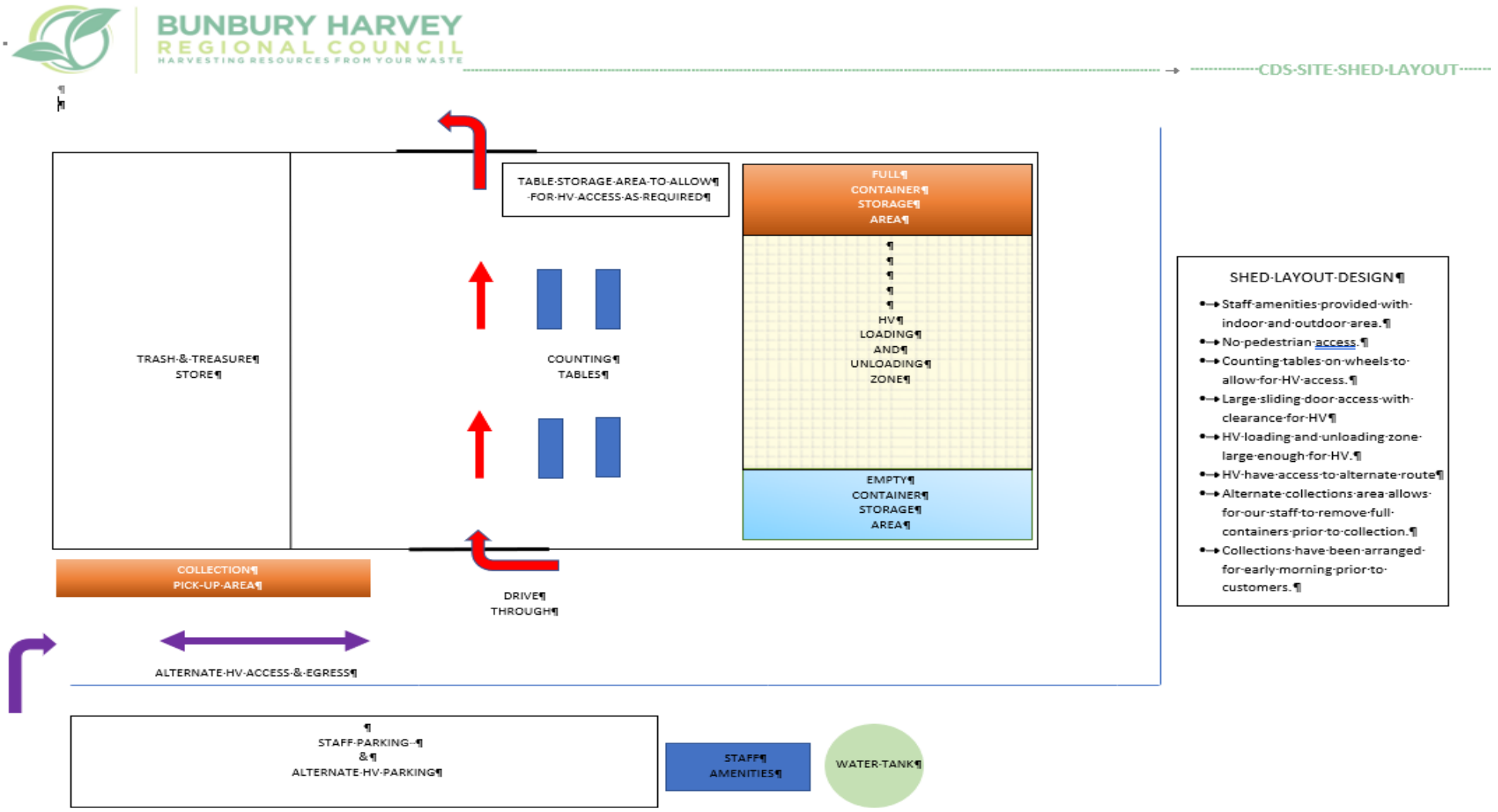


Figure 4: CDS layout

Monitoring points

Figure 5: Groundwater monitoring points

Schedule 2: Construction requirements

The detailed Cell 2/3, Leachate Pond and stormwater construction and installation requirements are described in Table 13, which reflect the specifications in *Bunbury Harvey Regional Council Stanley Road Landfill, Cells 2/3 Landfill Construction, Technical Specification ASK-1704-01-001 S01c, GreenTec Consulting, 15 March 2019*. In addition to these requirements all materials, construction and installation must meet the requirements set out in *Bunbury Harvey Regional Council Stanley Road Waste Management Facility Construction Works Quality Assurance (CQA) Plan, prepared by GreenTec Consulting dated 15 March 2019.*

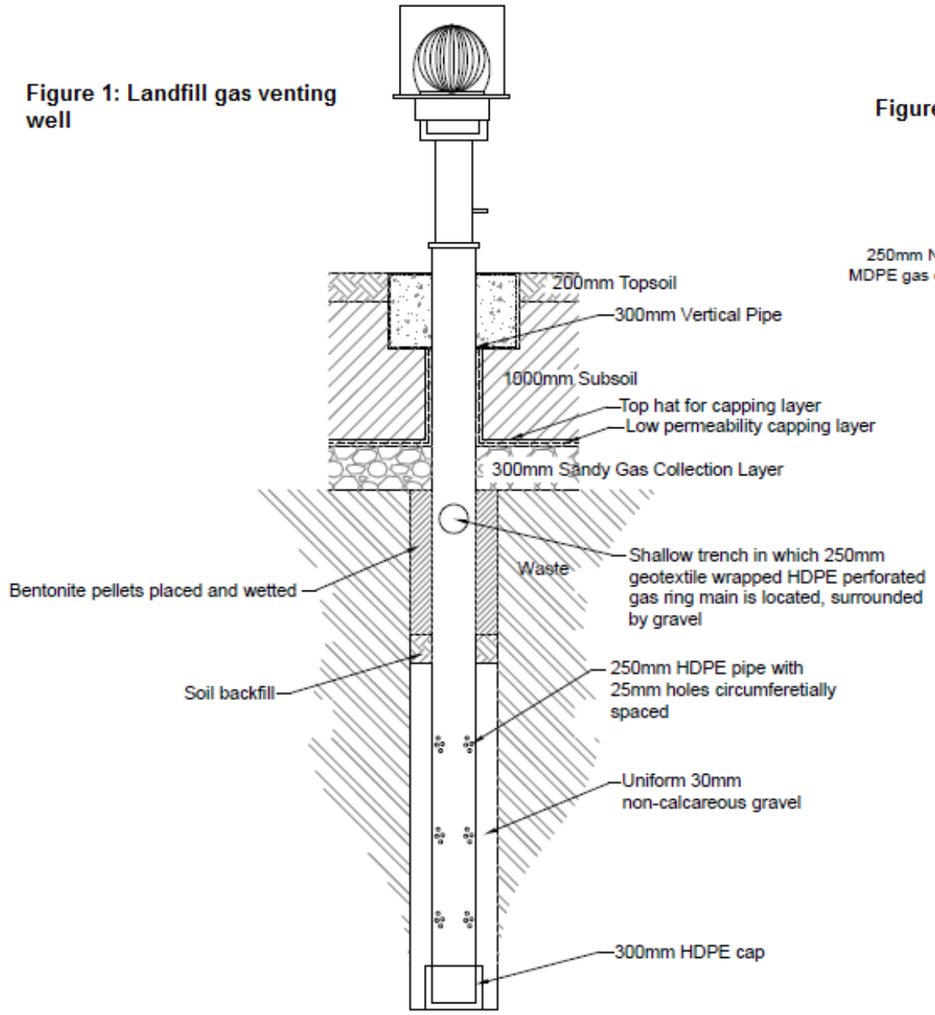
Table 13: Cell 2/3, Leachate pond and stormwater construction and installation requirements

	Infrastructure	Requirements
1.	General Construction Fill – Cell 2/3, Leachate Pond and Stormwater Pond	1. As depicted in Schedule 3 2. Shall be a compacted, shaped and proof rolled subgrade. 3. To be formed by cut and fill of the landfill cell footprint to achieve a minimum 2% fall towards the leachate sump 4. Moisture content on placement to be between 3% dry and 2% wet of optimum moisture content (using standard compaction) (test method AS1289). 5. To achieve minimum standard compaction during placement of 98% (test methods AS1289 5.8.1 and AS1289 5.1.1). 6. Internal and external batter slope gradient of 1V:5H.
2.	Groundwater depressurisation system – Cell 2/3 base only	1. Consisting of a geosynthetic drainage composite, groundwater collection drain, groundwater collection pipes (perforated and solid), drainage aggregate and separation geotextile layer.
3.	Geogrid – connection liner only	1. To comprise of stretched monolithic polyester (PET) flat or profile bars with welded junctions to achieve a strength of 120 kN/m and an elongation at ultimate tensile strength of 10%.
4.	Gas collection layer (drainage aggregate)– connection liner only	1. Gravel to a thickness of 200 mm 2. To consist of a minimum particle size of 20 mm, maximum particle size of 60 mm, and particle density of >2.4t/m^3
5.	Compacted clay layer - Cell 2/3, Leachate Pond and Stormwater Pond	1. To meet a permeability of < $1x10^{-9}$ m/s 2. To meet a maximum particle size of 50 mm 3. Minimum 500 mm thickness over the cell floor, and minimum 300 mm in the connection liner
6.	Geosynthetic Clay Liner (GCL) - Cell 2/3, Leachate Pond and Stormwater Pond	1. Liner to be placed over the entire cell base as depicted in Schedule 3. 2. GCL liner with a hydraulic conductivity of less than 1x10-9 m/s. 3. Adjacent panels shall overlap by at least 300 mm or by manufacturer specifications;
7.	HDPE Geomembrane - Cell 2/3, Leachate Pond and Stormwater Pond	1. Maximum permeability of <$1x10^{-14}$ m/s 2. Constructed of 2 mm HDPE geomembrane
8.	Cushion Geotextile	1. Cushion geotextile layer properties to comply with AS 3706.06
9.	Drainage aggregate – Cell 2/3 only	1. 300mm aggregate drainage layer to be placed over the leachate collection pipework to act as a drainage medium, as shown in Schedule 3.

	Infrastructure	Requirements
10.	Leachate collection pipework – Cell 2/3 only	1. Perforated leachate pipe and transfer pipes are to be DN 160mm PE80 PN 12.5 in accordance with AS 4130 2. Configured as shown in Schedule 3
11.	Leachate sump – Cell 2/3 only	1. Pre-cast concrete pipe placed vertically on a concrete base. 2. Leachate sump design as shown in Schedule 3. 3. To be constructed to enable maintenance of leachate head over the basal cell liner at a maximum of 300 mm. 4. The separation distance between the base of the sump and the maximum groundwater table elevations shall be greater than 2m.
12.	Separation geotextile	1. Separation geotextile layer properties to comply with AS 3706.06
13..	Anchor trench to secure GCL liner	1. Anchor trench dimensions and liner placement as shown in Schedule 3.
14.	Gas collection pipework – Cell 2/3 only	1. Pipework consisting of horizontal collectors or vertical bores 2. To operate under a vacuum that promotes gas flow from the waste mass towards the gas extraction wells
15.	Stormwater channels and evaporation pond	1. Stormwater management infrastructure to divert uncontaminated stormwater around the Perimeter of Cell 2/3 to evaporation pond. 2. Designed to manage stormwater from a 1 in 20-year event from a 13 ha area. 3. Leachate pond to be lined with 300 mm of compacted clay and geomembrane to achieve a permeability of <1x10-9 m/s

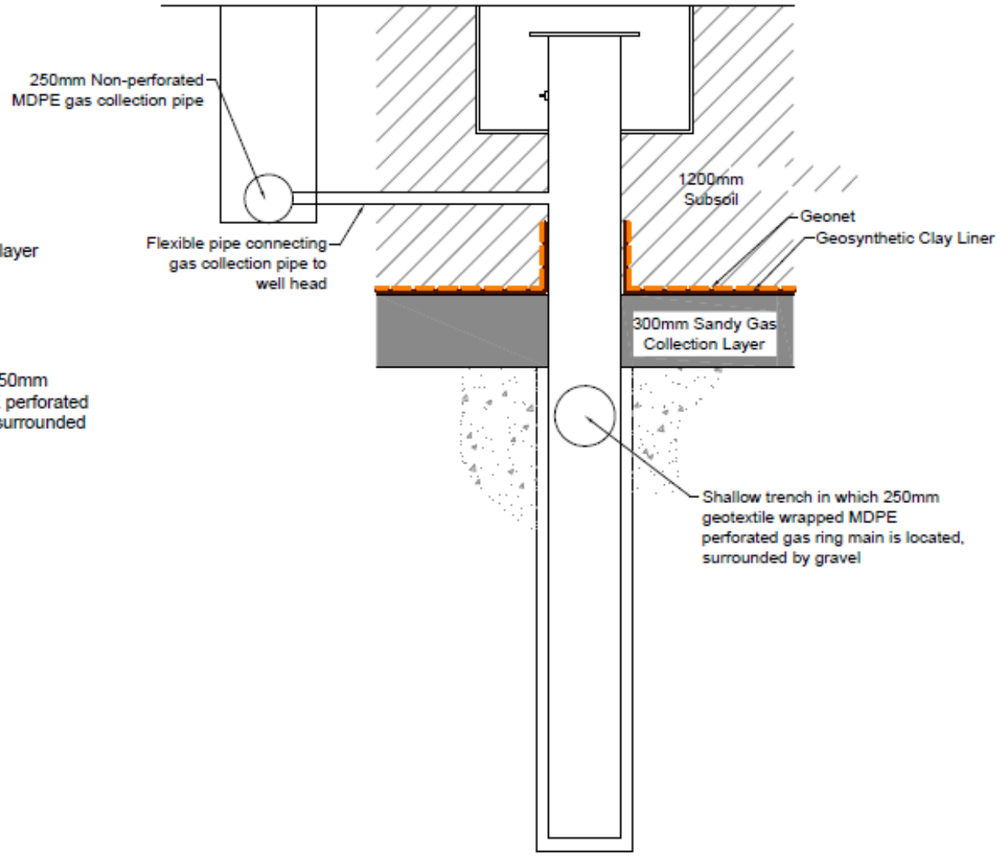
Schedule 3: Construction Specifications

Figure 1: Landfill gas venting well



Spiromatic Cowl

Figure 2: Landfill gas extraction well



Well Head after Cowl Removed

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Client: Bunbury-Harvey Regional Council

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.
2. All levels refer to Australian Height Datum.
3. DO NOT SCALE, use figured dimensions only. If in doubt please contact Talis Consultants.

No.	Date	Amendment / Issue	App.
A	22/01/16	Closure Plan	RC

Project: Stanley Road Landfill

Title: Gas Management - Typical Details

Drawn by:	PG	Job No:	TW15005
Checked by:	SC	File No:	TW15005DG051
Approved by:	RC	Dg. No:	051
Scale:	NTS	Rev:	A
Date:	22/01/2016		

Figure 6: Landfill gas aspiration well construction specifications

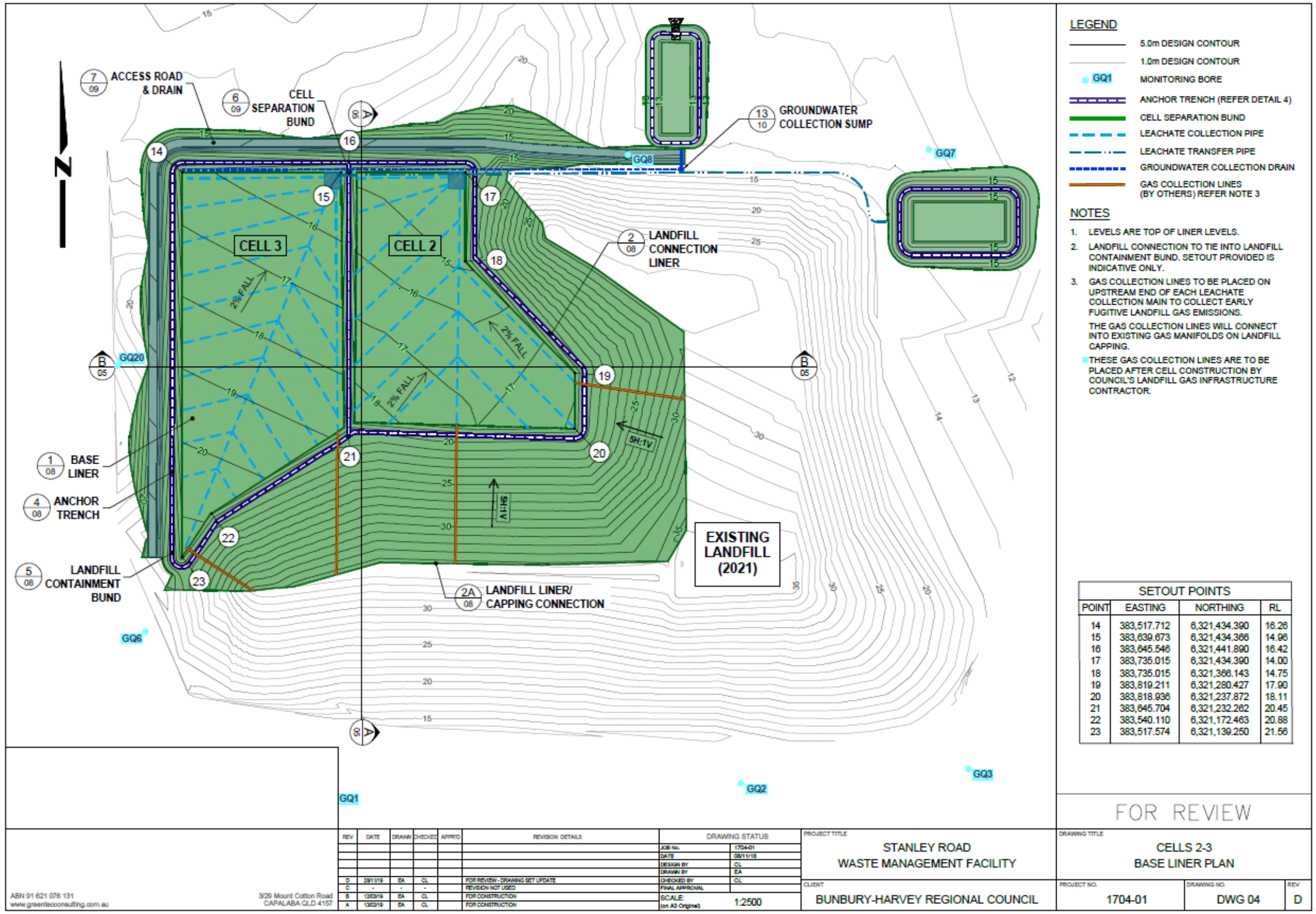

Figure 7: Landfill Base Liner Plan

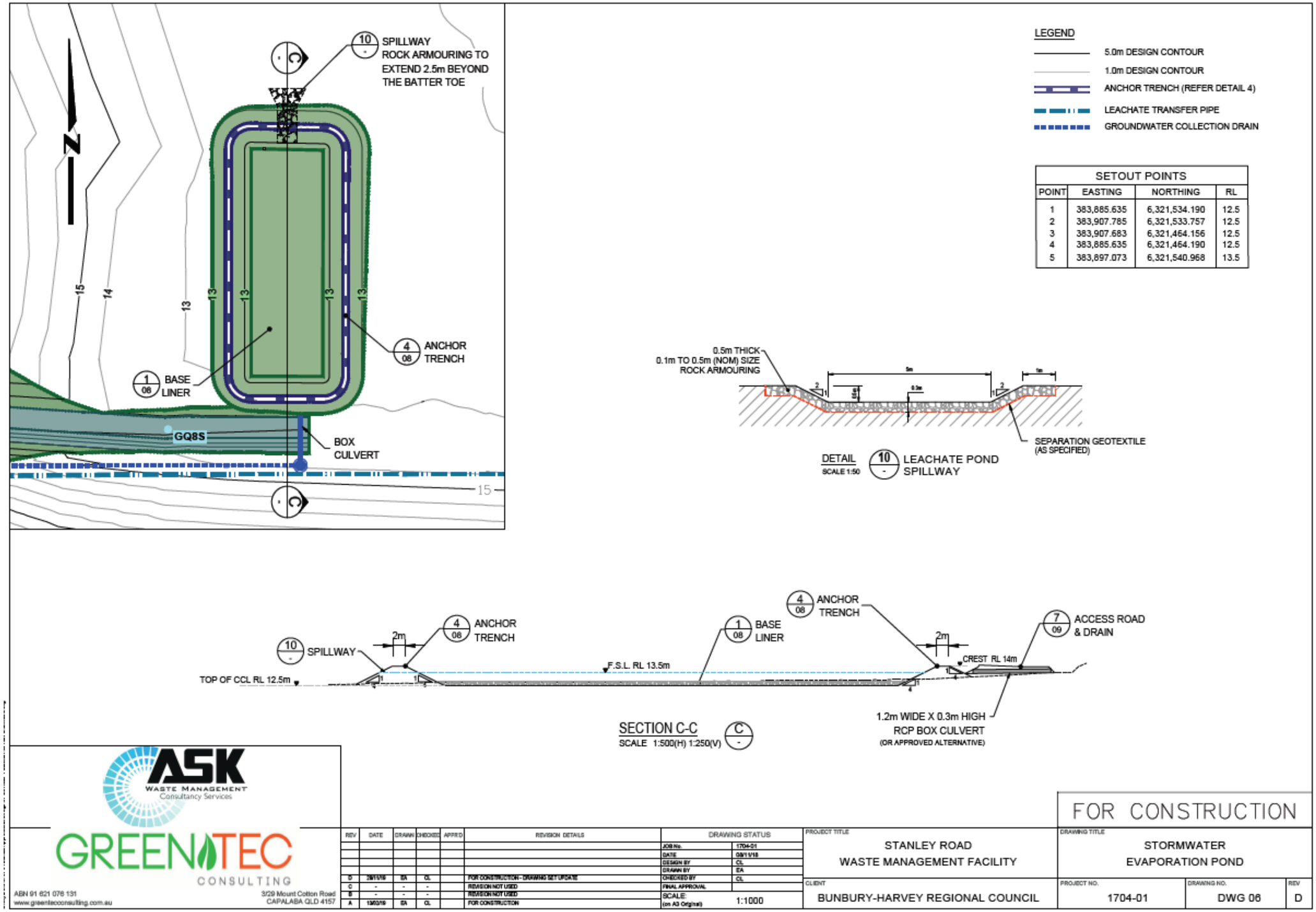

Figure 8: Stormwater evaporation construction details

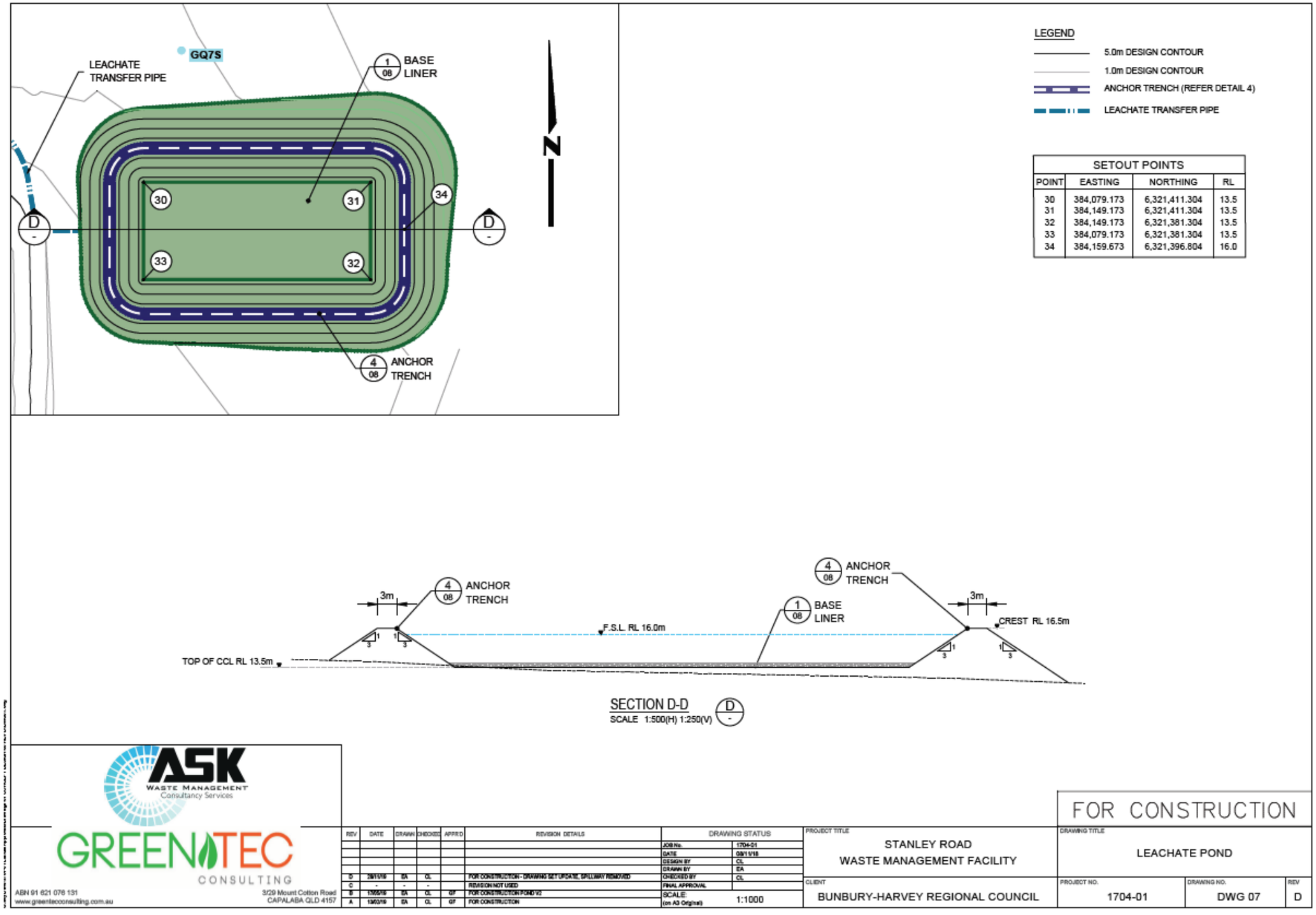

Figure 9: Leachate pond construction details

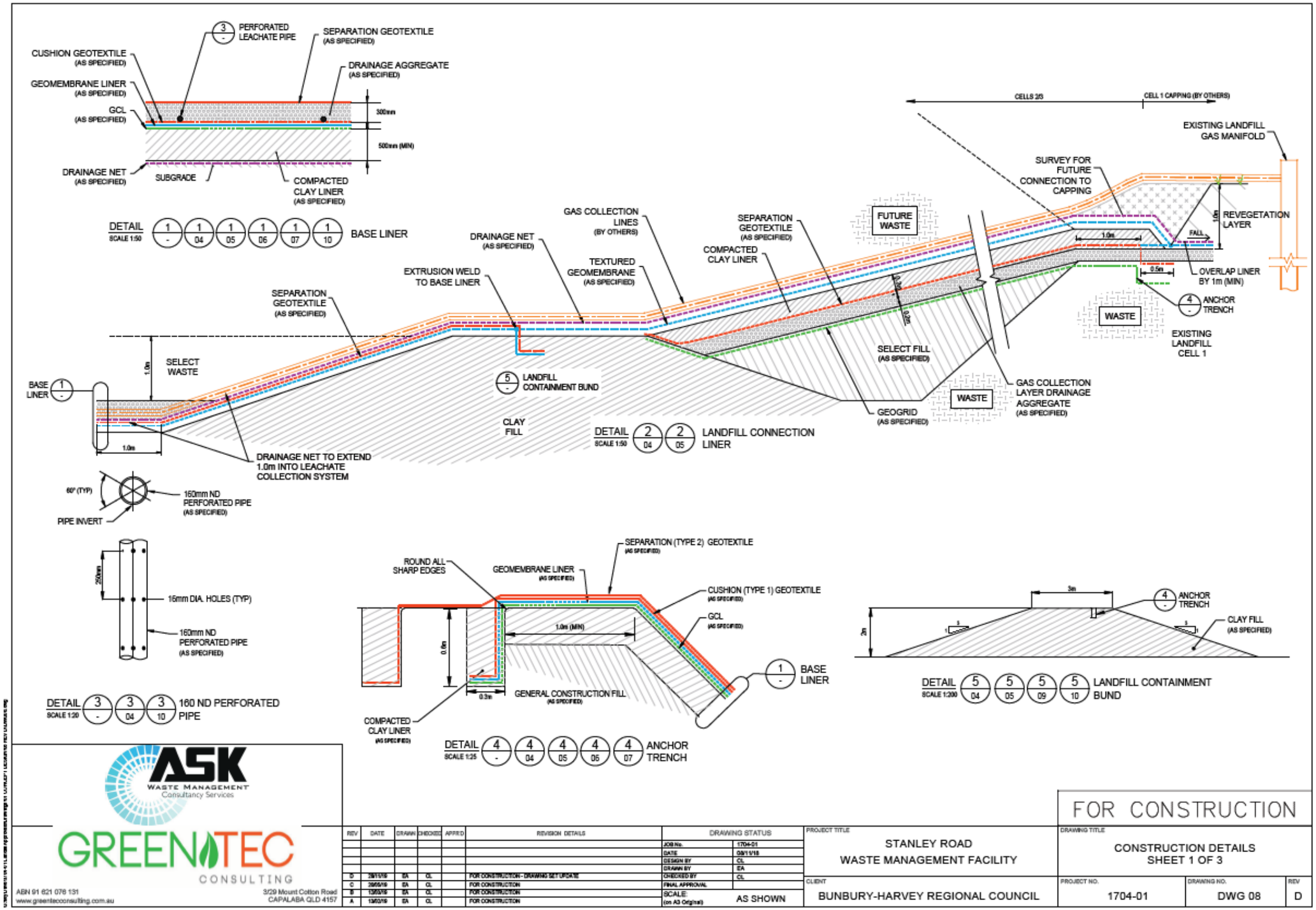

Figure 10: Construction Detail 1 of 3

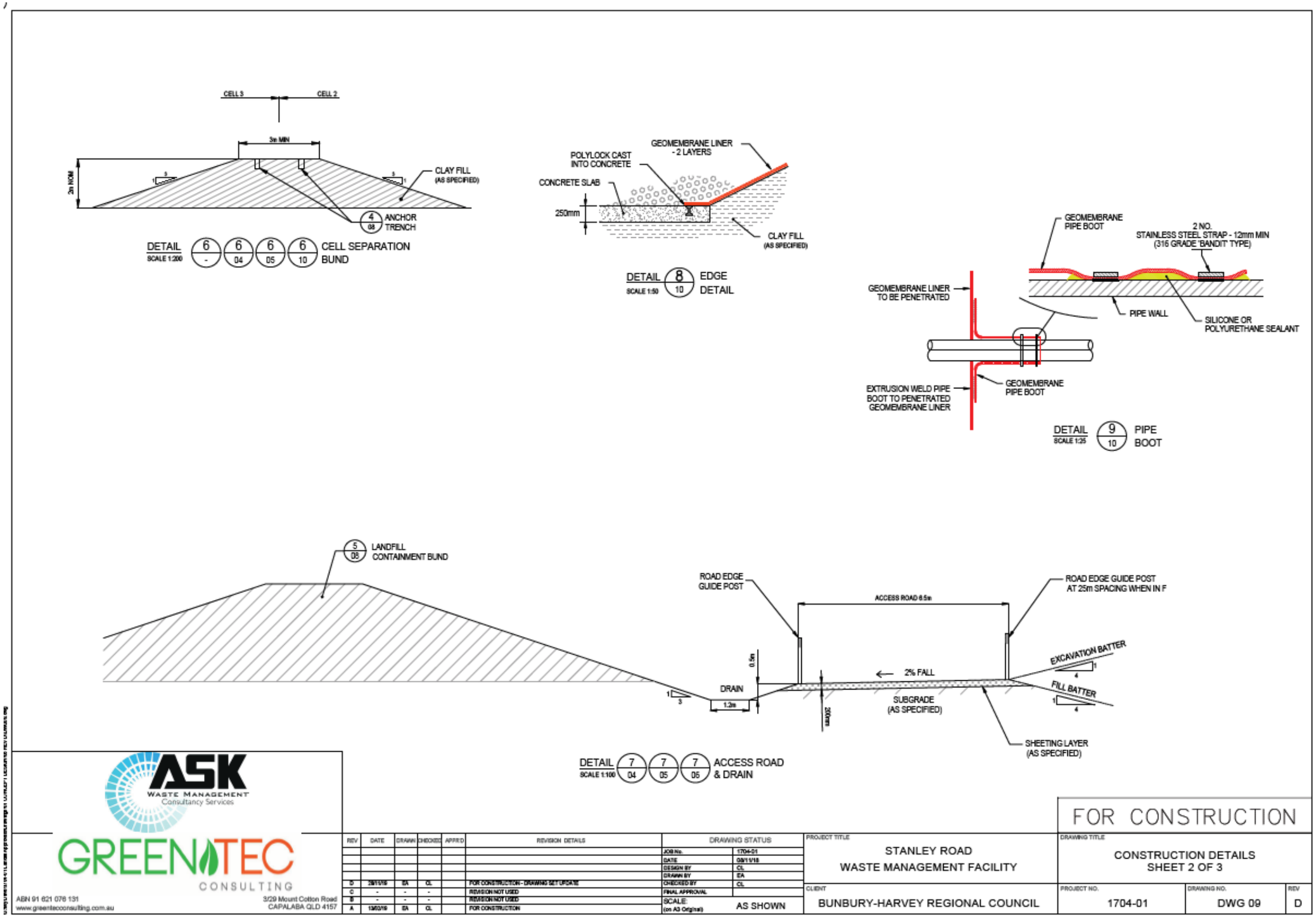

Figure 11: Construction detail 2 of 3

L8949/2016/2

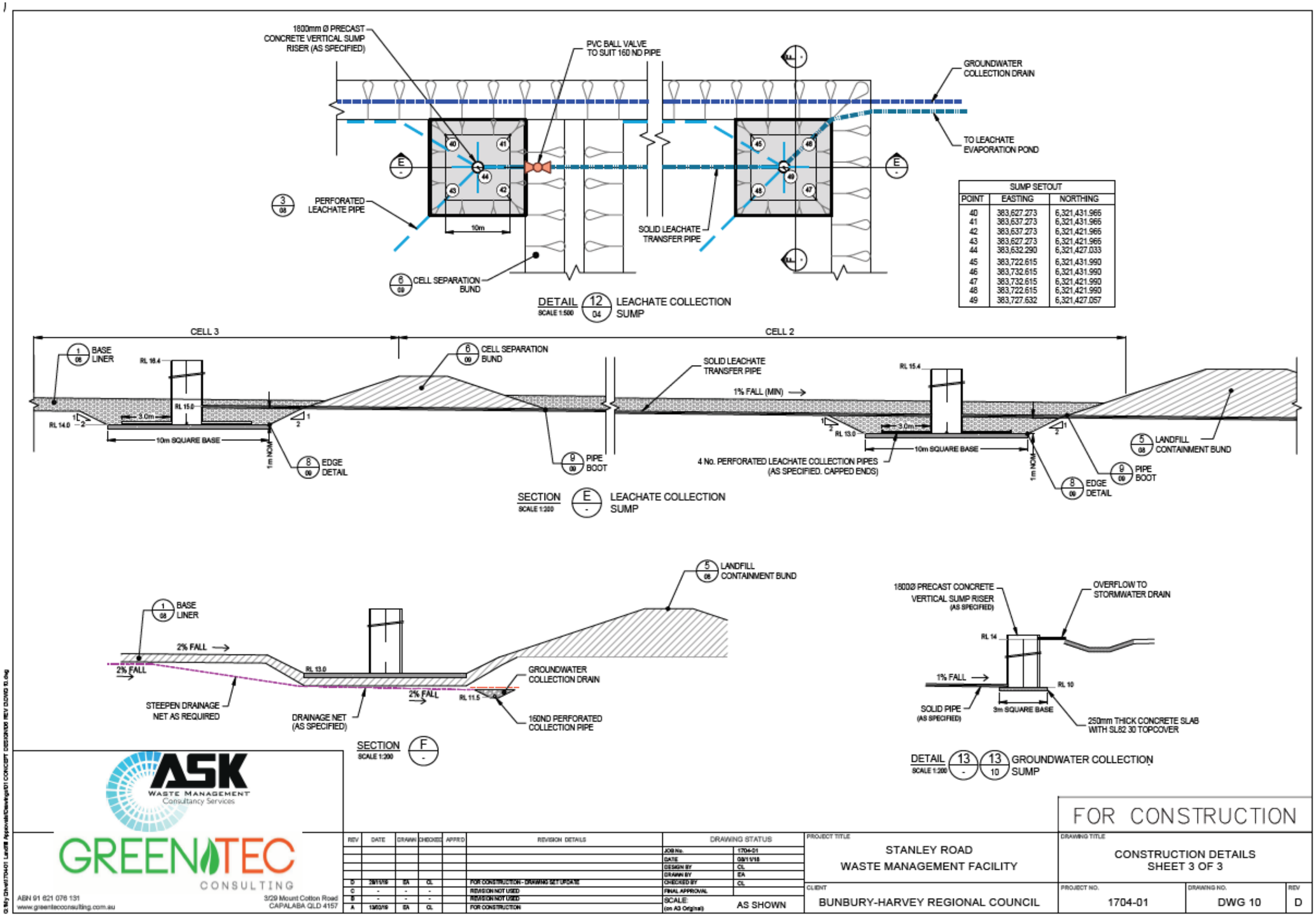

Figure 12: Construction detail 3 of 3

Schedule 4: Premises boundary

The premises boundary is defined by the coordinates below.

Easting	Northing
383470.15	6320954.25
383470.15	6321812.78
388073.21	6321841
384806.45	6320980.11