



Works Approval

Works approval number	W3108/2025/1
Works approval holder	City of Cockburn
Registered business address	9 Coleville Crescent SPEARWOOD WA 6163
DWER file number	INS-0003108 APP-0031521
Duration	14/04/2026 to 14/04/2031
Date of issue	14/04/2026
Premises details	Henderson Waste Recovery Park 920 Rockingham Road WATTLEUP WA 6166 Legal description - Lot 202 on Deposited Plan 60443, Lot 2 on Diagram 17988 and Lot 235 on Deposited Plan 226117

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 62: Solid Waste Depot: premises on which waste is stored, or sorted, pending final disposal or reuse.	15,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 14 April 2026, by:

**MANAGER, WASTE INDUSTRIES
APPROVALS – STATEWIDE DELIVERY**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
14/04/2026	W3108/2025/1 APP-0031521	Works approval granted.

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

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

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct and install the infrastructure;
 - (b) in accordance with the corresponding design and construction requirements; and
 - (c) at the corresponding infrastructure location,
 as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Green waste hardstand	<ol style="list-style-type: none"> a) 65 m x 40 m hardstand constructed with compacted 300 mm limestone base and 200 mm recycled asphalt surface. b) Designed with a minimum 2% fall to direct all water that has been in contact with green and GO waste materials to the lined leachate collection sump. c) Constructed to support, without sustained damage, the weight of sorted materials and any machinery operation on the surface. d) Surface and bunding (including joining seals) to be free of cracks, leaks and defects. 	As depicted in Schedule 1
2.	Leachate collection sump	<ol style="list-style-type: none"> a) Construction of 15 m x 20 m x 2 m leachate collection sump. b) Designed to contain runoff from a 1 in 100-year, 24-hour rainfall event with an annual exceedance probability of 5%. c) Lined with a 2.0 mm HDPE geomembrane achieving a permeability of 1×10^{-9} m/s or less (or equivalent). d) All pipework, fittings and joins (where applicable) to be constructed of impervious material and free from leaks and defects. e) A secure, lockable security fence installed around the basin, constructed from galvanised materials and compliant with AS 1752.1:2010. The fence must be at least (or equivalent to) 1.8 m high mesh topped with three strands of barbed wire (total height 2.3 m) and include a lockable gate built to the same specification. 	As depicted in Schedule 1 (referred to as 'stormwater collection sump').

Construction quality assurance requirements

2. The works approval holder must ensure that the leachate collection sump geomembrane liner referenced in Table 1, item 2 (c) above meets the specifications outlined in Schedule 2.

Compliance reporting

3. The works approval holder must within 30 calendar days of an item of infrastructure required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
4. The Environmental Compliance Report required by condition 3, must include as a minimum the following:
 - (a) certification by a suitably qualified engineer that each item of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1;
 - (c) for the installation of the leachate collection sump geomembrane liner, certification from a suitably qualified engineer which demonstrates that the liner has been installed in accordance with the specifications and drawings for the project; and
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

5. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure.
6. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 5 for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 6 (a).

Time limited operations requirements

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

Table 2: Infrastructure requirements during time limited operations

	Site infrastructure	Operational requirements	Infrastructure location
1.	Green waste hardstand	<ul style="list-style-type: none"> a) The integrity of the surface and bunding (including joining seals) to be maintained free from cracks and defects. b) All leachate from the green waste hardstand must be directed into the leachate collection sump. c) Vehicle access road must be unobstructed at all times. 	As depicted in Schedule 1
2.	Leachate collection sump	<ul style="list-style-type: none"> a) A top-of-embankment freeboard \geq 500 mm is maintained at all times. b) Overtopping of the leachate collection sump does not occur. c) The integrity of the HDPE lining is maintained. d) Security fencing to be maintained in good repair to prevent unauthorised access. e) All leachate from the green waste hardstand is directed to the leachate collection sump. f) The embankments adjacent to the existing leachate ponds B and C are to be checked on a weekly basis for cracking, slumping or any other signs of instability. g) Where potential instability of the embankments adjacent to existing leachate ponds B and C are suspected or evident in accordance with the investigations outlined in (f) corrective measures are to be undertaken. 	As depicted in Schedule 1 (referred to as 'stormwater collection sump').

8. During time limited operations, the works approval holder must ensure that the waste type specified in Table 3 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

Table 3: Waste processing during time limited operations

Waste Type	Process(es)	Process limits and/or specifications
Green and GO waste	Receipt, handling and temporary storage prior to off-site processing	<ul style="list-style-type: none"> a) Only be stored on the green waste hardstand shown in Schedule 1, prior to removal from the premises. b) Not allowed to dry out (brown in colour).

Waste Type	Process(es)	Process limits and/or specifications
		<ul style="list-style-type: none"> c) No more than 2,000 m³ of green waste stored at any one time. d) Storage of green and GO waste is limited to 5 days from the time of receipt. e) All non-organic and non-conforming waste removed from green and GO waste is to be contained in a vessel that can be covered, sealed and free from leaks. f) A 5-metre fire break shall be maintained around the green waste area. g) Water cart and/or hoses are to be used for dust suppression.

Monitoring during time limited operations

9. During time limited operations, the works approval holder must record the total amount of waste accepted onto and removed from the premises for the waste type listed in Table 4, in the corresponding unit, and for the corresponding time period, as set out in Table 4.

Table 4: Waste input and output monitoring

Waste Type	Unit	Time period
Green and GO waste	tonnes	Each load entering and leaving the facility.

Compliance reporting

10. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is sooner.
11. The works approval holder must ensure the report required by condition 10 includes the following:
- (a) a summary of the time limited operations, including timeframes and amount of material processed;
 - (b) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable);
 - (c) a review of performance and compliance against the conditions of the works approval; and
 - (d) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

- 12.** The works approval holder must 12 months after commencement of operations of the infrastructure outlined in condition 1:
- (a) prepare a report demonstrating the stability of the embankments adjacent to the existing leachate ponds B and C; and
 - (b) submit the report to the CEO to confirm that embankment stability has not been adversely affected.
- 13.** The report required by condition 12 must:
- (a) be certified by a suitably qualified engineer that the embankments have been assessed for stability;
 - (b) include details of the assessment method and findings; and
 - (c) be signed by a person authorised to represent the works approval holder and contain the printed name and position of that person.

Records and reporting (general)

- 14.** The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- 15.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
- (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1;
 - (c) monitoring programmes undertaken in accordance with condition 9.
 - (d) complaints received under condition 14.
- 16.** The books specified under condition 15 must:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

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

Table 5: Definitions

Term	Definition
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
condition	a condition to which this works approval is subject under section 62 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed and in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i> .
freeboard	means the distance between the maximum water surface elevations and the top of retaining walls or structures at their lowest point.
GO waste	Garden organics waste sourced from source-separated kerbside municipal or source-separated commercial collections.
green waste	means waste that originates from flora and which does not contain or has not been treated or coated with, preserving agents, biocides, fire retardants, paint, adhesives or binders.
HDPE	high-density polyethylene.
leachate	means liquid released by or water that has percolated through waste and which contains some of its constituents.

Term	Definition
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
suitably qualified engineer	means a person who: (a) holds a Bachelor of Engineering recognised by the Institute of Engineers; (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 Works Approval Holder's business.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITION

Schedule 1: Maps and drawings

Premises map

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

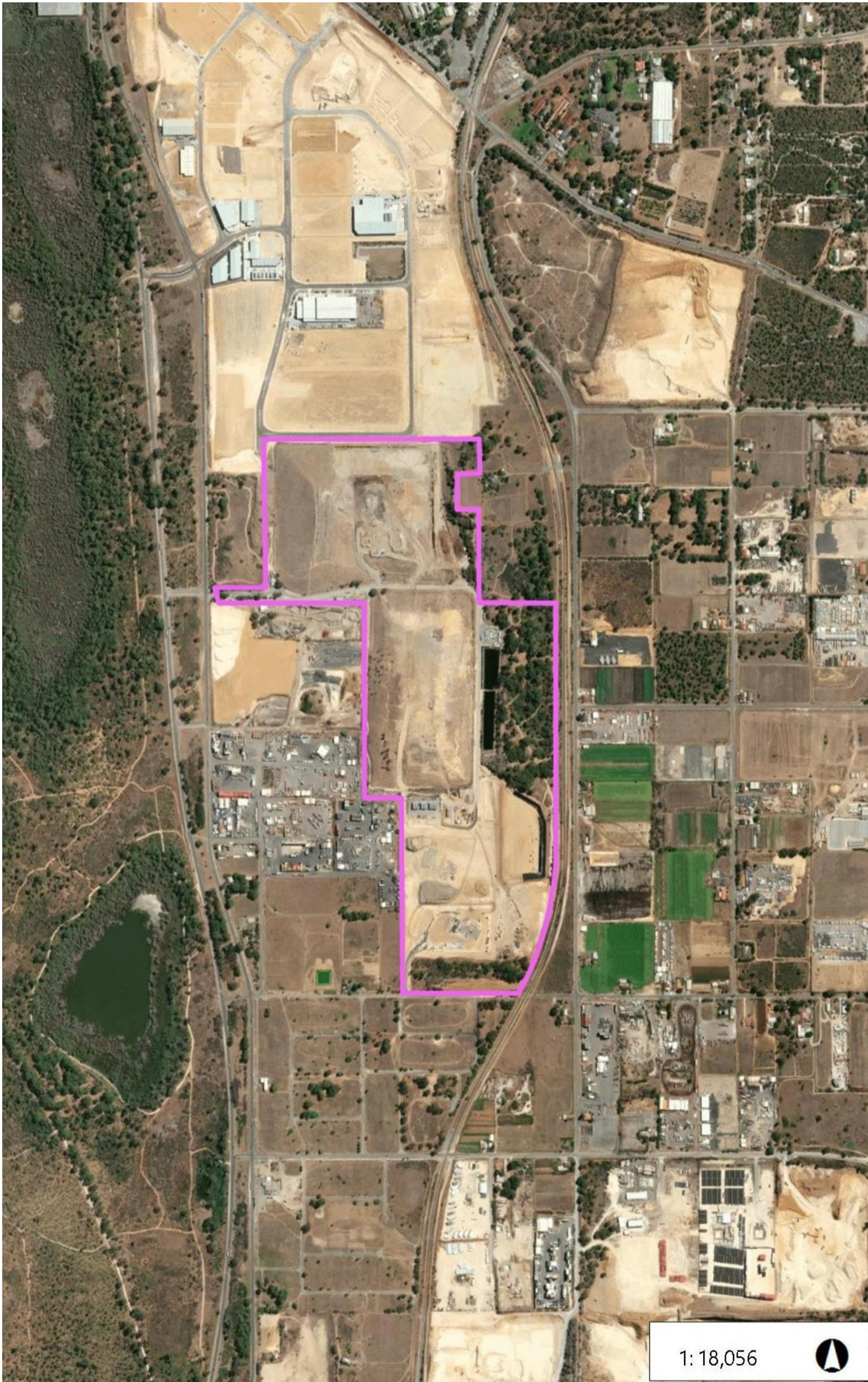


Figure 1: Boundary of the prescribed premises

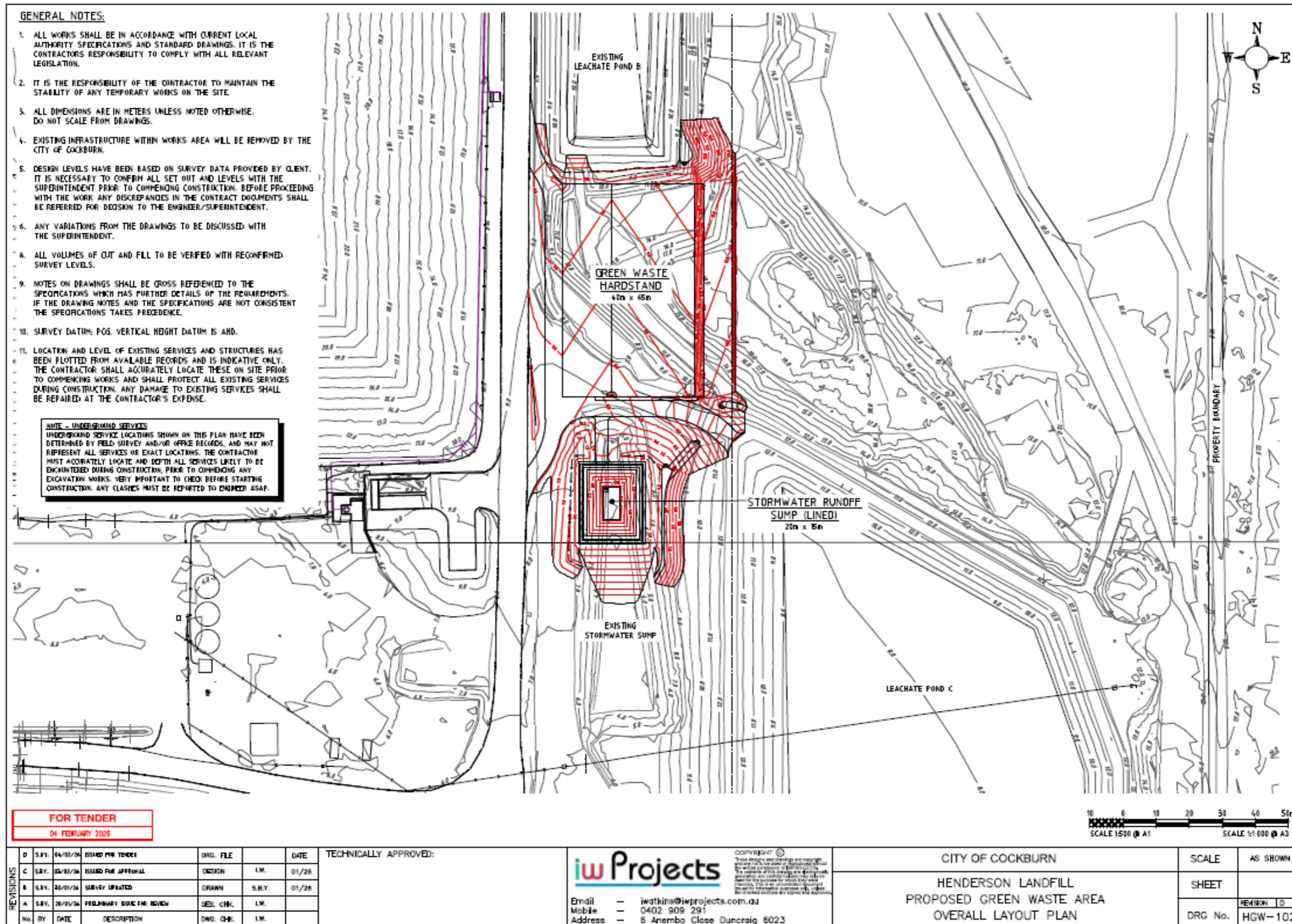


Figure 2: Proposed infrastructure layout (1 of 2)

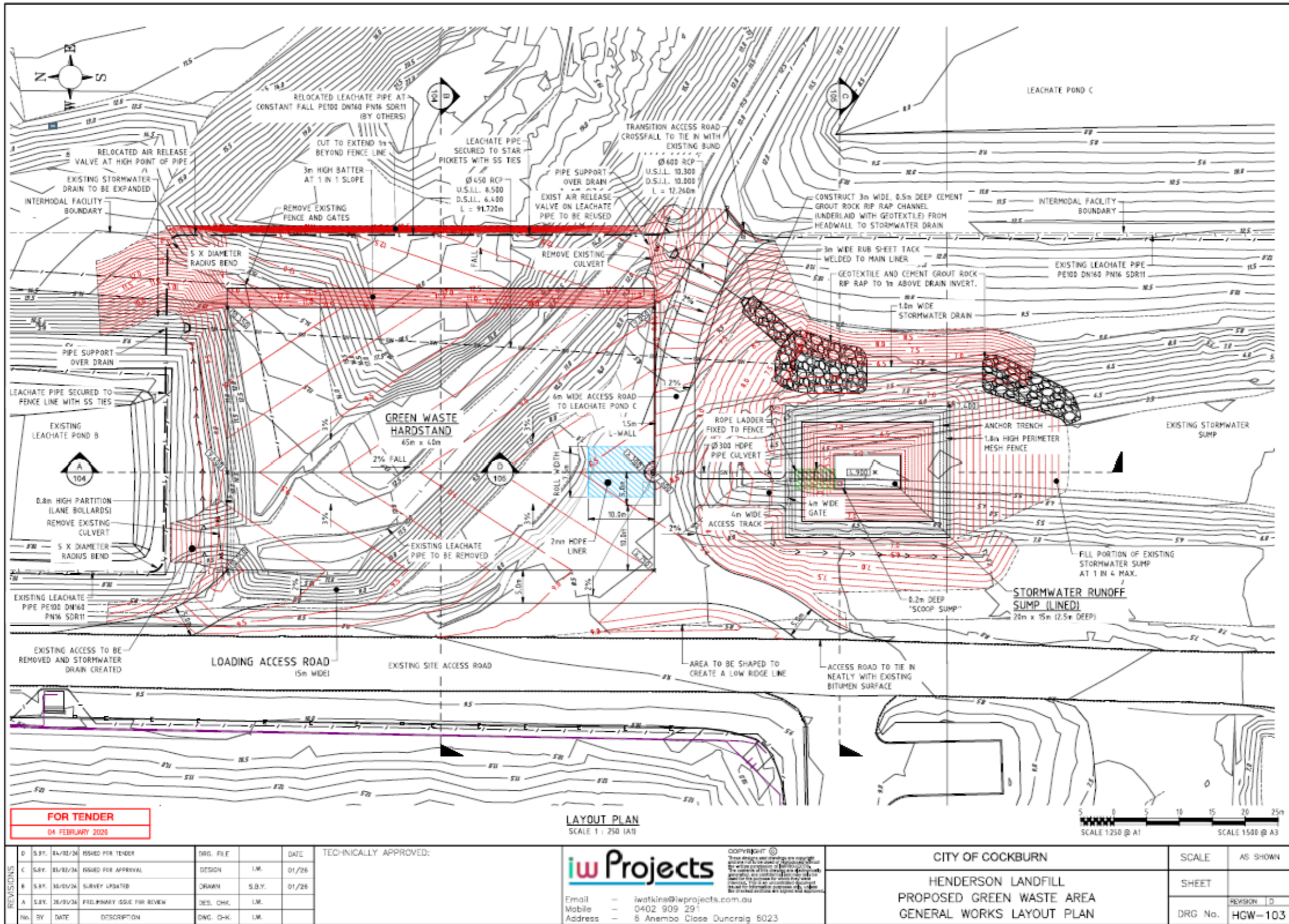


Figure 3: Proposed infrastructure layout (2 of 2)

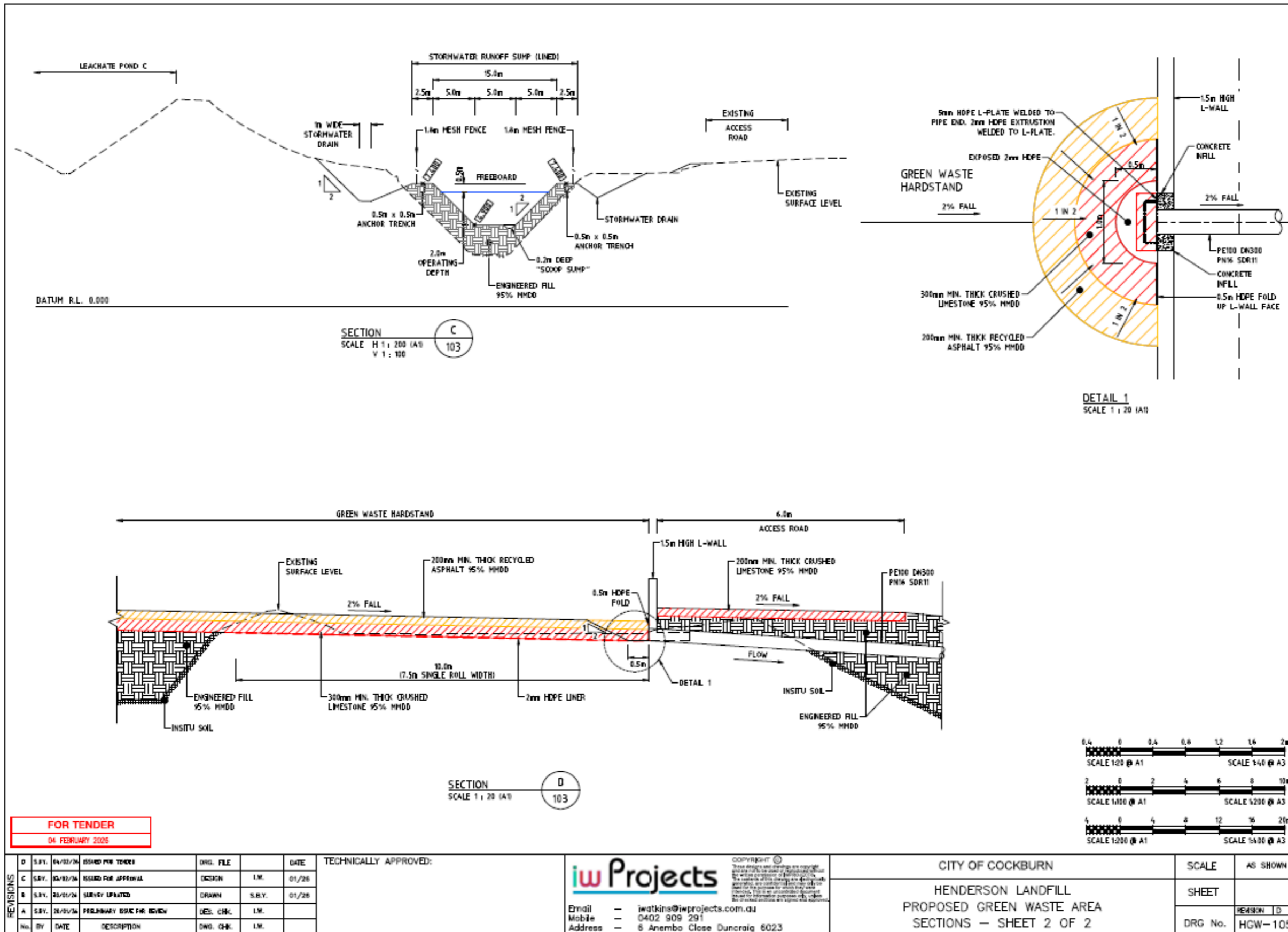


Figure 4: Proposed infrastructure details (1 of 2)

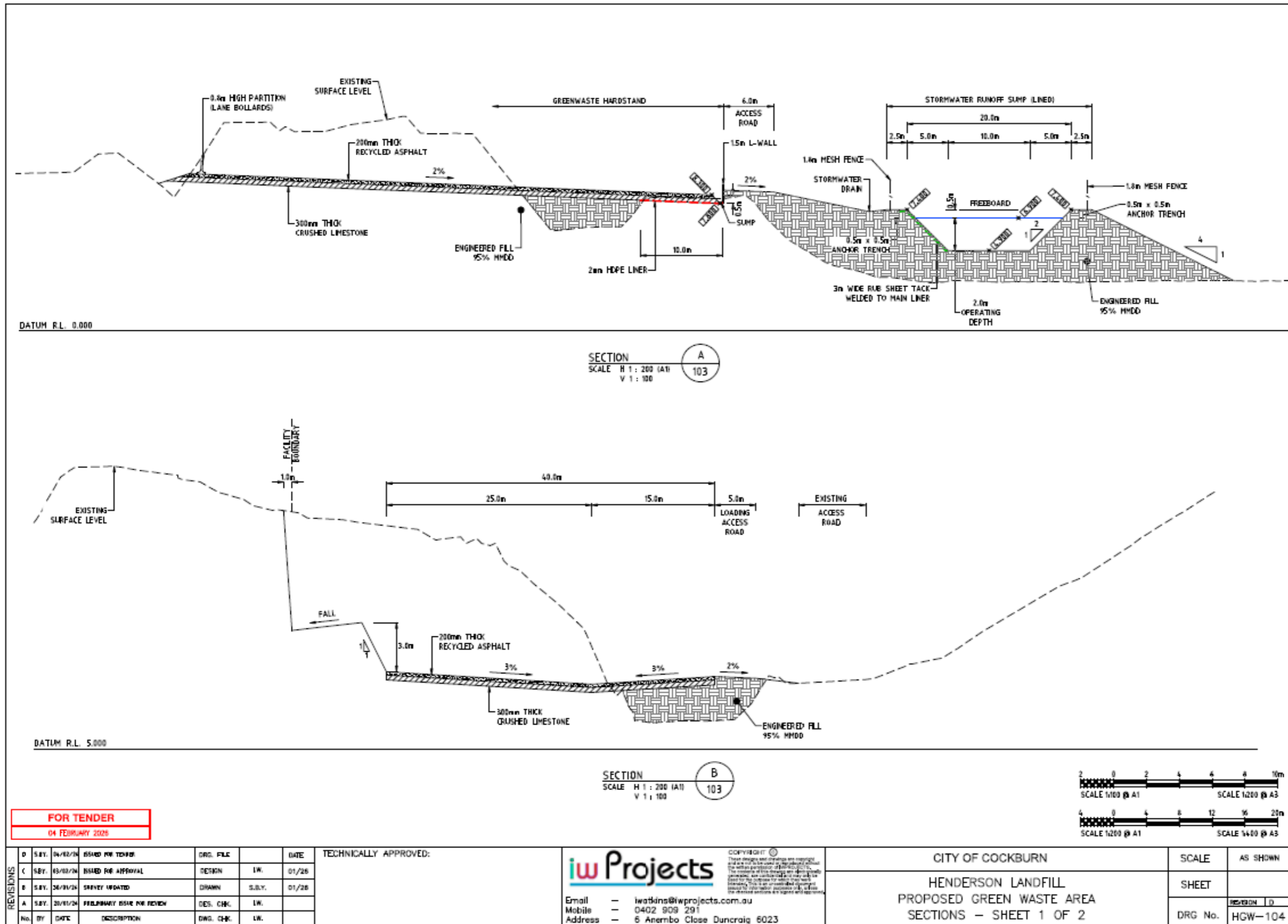


Figure 5: Proposed infrastructure details (2 of 2)

Schedule 2: Geomembrane CQA requirements

Table 6: HDPE Geomembrane material specifications

Property	Test Method	HDPE Test Value – 2.00mm Smooth Textured	Testing Frequency (minimum)
Thickness (min. ave.) • Lowest individual for 8 out of 10 values • Lowest individual for any of the 10 values	D 5994	nom. (-5%) - 10% - 15%	Per roll
Asperity Height (min. ave.) (1)	D 7466	0.40 mm	Every 2 nd roll (2)
Density (min. ave.);	D 1505/D 792	0.940 g/cc	90,000 kg
Tensile Properties (min. ave.) (3) • Yield strength • Break strength • Yield elongation • Break elongation	D 6693 Type IV	29 kN/m 21 kN/m 12% 100%	9,000 kg
Tear Resistance (min. ave.)	D 1004	249 N	20,000 kg
Puncture Resistance (min. ave.)	D 4833	534 N	20,000 kg
Carbon Black Content - Particle size ~20 nm (range)	D 4218 (5)	2.0-3.0%	9,000 kg
Carbon Black Dispersion	D 5596	note (6)	20,000 kg
Stress Crack Resistance (4)	D 5397 (App.)	500 hr.	Per GRI GM10
Geomembrane Oxidative Induction Time (OIT) (min. ave.) (7) (a) Standard OIT, and (b) High Pressure OIT	D 8117 D 5885	100 min. 400 min.	90,000 kg
Geomembrane Oven Aging at 85°C (7) (11) (a) Standard OIT (min. ave.) - % retained after 90 days, and (b) High Pressure OIT (min. ave.) - % retained after 90 days	D 5721 D 8117 D 5885	55% 80%	Per each formulation
Geomembrane UV Resistance (8) (11) (a) Standard OIT (min. ave.) or (b) High Pressure OIT (min. ave.) - % retained after 1,600 hrs (10)	D 7238 D 8117 D 5885	N.R. (9) 50%	Per each formulation
Longitudinal Edge		Smooth on both sides	

(1) Of 10 readings, 8 out of 10 must be ≥ 0 (1) Of 10 readings, 8 out of 10 must be ≥ 0.35 mm, and lowest individual reading must be ≥ 0.30 mm; also see Note 6.

(2) Alternate the measurement side for double sided texture sheet.

(3) Machine direction (MD) and cross machine direction (XMD) average values shall be on the basis of 5 test specimens each direction.

- Yield elongate is calculated using a gauge length of 33 mm.

- Break elongation is calculated using a gauge length of 50 mm.

- (4) The SP-NCTL test is not appropriate for testing geomembranes with textured or irregular rough surfaces. Test shall be constructed on smooth edges of textured rolls or on smooth sheets made from the same formulation is being used for the textured sheet materials. The yield stress used to calculate the applied load for the SP-NCTL test shall be the manufacturer's mean value via MQC testing.
- (5) Other methods such as D 1603 (tube furnace) or D 6370 (TGA) are acceptable if an appropriate correlation to D 4218 (muffle furnace) can be established.
- (6) Carbon black dispersion (only near spherical agglomerates) for 10 different views: 9 in Categories 1 or 2 and 1 in Category 3.
- (7) It is also recommended to evaluate samples at 30 and 60 days to compare with the 90 day response.
- (8) The condition of the test shall be 20 hr. UV cycle at 75°C followed by 4 hr. condensation at 60° C.
- (9) Not recommended since the high temperature of the Std-OIT test produces an unrealistic result for some of the antioxidants in the UV exposed samples.
- (10) UV resistance is based on percentage retained value regardless of the original HP-OIT value.
- (11) Test results are to be less than 12 months old relative to the date of manufacture of the delivered geomembrane and the manufacturer is to provide certification that the resin is of the same formulation as the rolls supplied for the works.