

Buronga Landfill Expansion

Erosion and Sediment Control Plan

Wentworth Shire Council

SSD-10096818

17 September 2024

Ref: 202597R12_Apx.K_Rev03



Building exceptional
outcomes together



Document History and Status

Rev	Description	Author	Reviewed	Approved	Date
0	For Client Comment	BT	DN	MI	22 Dec 2023
1	Final	BT	DN	MI	27/02/2024
2	Litter Section Included	AS	AS	AS	24/07/2024
3	Adress the DPHI comments	MI/DD	MI	AS	17/09/2024

© Tonkin Consulting Pty Ltd

This document is, and shall remain, the property of Tonkin Consulting. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.



Contents

Project: Buronga Landfill Expansion | Erosion and Sediment Control Plan
Client: Wentworth Shire Council
Ref: 202597R12

1	Introduction	5
1.1	Background	5
1.2	Site and Ownership	5
1.3	Compliance with Regulatory Requirements	5
1.4	Compliance with Environmental Protection Licence	5
1.5	Relevant Limits and Performance Measures	5
1.6	Performance Indicators	6
1.7	Reference Documentation	6
1.8	Consultation	6
2	Site Overview	7
2.1	Surface Water.....	7
2.2	Stormwater Infrastructure.....	7
2.3	Erosion and Sediment Control Plan.....	7
3	Reporting.....	11
3.1	Annual Reporting	11
3.2	Incident Reporting.....	11
3.3	Compliance Reporting.....	13
3.4	Independent Audit.....	13
3.5	Record Keeping.....	13
4	Contingency Plan	15
4.1	Incident Detection and Immediate Actions	15
4.2	Notification and Reporting	15
4.3	Mitigation and Remediation Actions	15
4.4	Review and Continuous Improvement.....	15
4.5	Emergency Response Plan.....	15
5	Continuous Improvement Program.....	16
5.1	Objectives.....	16
5.2	Regular Inspections and Assessment	16
5.3	Incorporation of Best Practices.....	16



5.4	Corrective Actions	16
5.5	Periodic Review.....	16
6	Plan Review Protocol	17

Tables

Table 2-1	Stormwater Basins for Buronga Landfill.....	7
------------------	--	----------

Appendix A – Figures



1 Introduction

1.1 Background

This Erosion and Sediment Control Plan has been prepared by Tonkin on behalf of Wentworth Shire Council (WSC) as part of the Landfill Environmental Management Plan (LEMP) in support of the expansion to the Buronga Landfill (the site).

WSC currently holds Environmental Protection Licence (EPL) 20209 which covers waste disposal activities (Construction of landfill cells and leachate and stormwater collection systems) and resource recovery activities (recovered aggregate processing and storage / Waste storage) at the site and is under the development processes of the expansion to the site under a Development Consent Application Number: SSD 10096818.

1.2 Site and Ownership

The site is located at 258 Arumpo Road, Buronga NSW and is shown in Figure 2 and Figure 3 of Appendix A. The site is owned and operated by WSC.

1.3 Compliance with Regulatory Requirements

The primary regulatory requirements for the operation of the site are:

NSW Department of Planning, Industry and Environment, 2023, Buronga Landfill Expansion Development Consent, 19 July 2023, Ref: SSD-10096818 (the Development Consent);

NSW EPA, 2023, Environmental Protection Licence – 20209, Licence Version Date 8 March 2023 (the EPL);

NSW EPA, 2016, *Environmental Guidelines, Solid Waste Landfills*, Second Edition, April 2016, Ref: EPA 2016/0259 (The Landfill Guidelines);

Waste Avoidance and Resource Recovery Act 2001 (NSW) (WAAR Act 2001);

Protection of the Environment Operations Act 1997 (NSW) (the POEO act 1997);

Landcom, 2004. *Managing urban stormwater: soils and construction*, Volume 1, March 2004, 4th edition.

1.4 Compliance with Environmental Protection Licence

WSC holds EPL number 20209 for the operations at the site. This WMP has been prepared to ensure compliance with the EPL. It is noted that this WMP is submitted to the EPA for consultation and approval.

1.5 Relevant Limits and Performance Measures

The Erosion and Sediment Control Plan for the site outlines key performance measures to ensure that erosion and sedimentation are managed effectively, particularly during storm events and land disturbance activities. The following limits and measures are established based on regulatory requirements and industry best practices:

1.5.1 Sediment Control Measures

All sediment-laden water must be captured and treated before being discharged from the site. This is achieved using sediment basins, as outlined in Table 2-1, designed to handle sediment-laden runoff from a 1 in 10-year storm event.

1.5.2 Erosion Control

Exposed soil areas must be stabilised as soon as possible to prevent erosion. Measures such as revegetation or mulching will be applied where practical to reduce the potential for soil erosion.



Surface water run-off from disturbed areas will be diverted to sediment basins to prevent direct discharge into local watercourses or drainage systems.

1.5.3 Stormwater Management

Stormwater infrastructure, including drainage channels and sediment basins, must be maintained to prevent overflow or erosion during significant rainfall events.

The system must be capable of handling a 1 in 25-year average recurrence interval (ARI) 24-hour storm event without causing erosion or sediment transport outside the site boundary.

1.6 Performance Indicators

No formal monitoring is required for this Erosion and Sediment Control Plan. However, the effectiveness of the implemented erosion and sediment control measures will be assessed through regular site inspections as part of routine operational activities. These inspections will ensure that:

- Areas prone to erosion are stabilised with appropriate measures (e.g., vegetation, mulching).
- Sediment control structures, such as bunds and silt fences, remain in place and are functioning as designed.
- Stormwater is effectively diverted from disturbed areas to prevent sediment transport.

1.7 Reference Documentation

This plan was written with reference to the following documents and legislation:

NSW Department of Planning, Industry and Environment, 2023, Buronga Landfill Expansion Development Consent, 19 July 2023, Ref: SSD-10096818 (the Development Consent);

NSW EPA, 2023, Environment Protection Licence – 20209, Licence Version Date 8 March 2023 (the EPL);

NSW EPA, 2016, *Environmental Guidelines, Solid Waste Landfills*, Second Edition, April 2016, Ref: EPA 2016/0259 (The Landfill Guidelines);

Waste Avoidance and Resource Recovery Act 2001 (NSW) (WAAR Act 2001);

Protection of the Environment Operations Act 1997 (NSW) (the POEO act 1997);

Landcom, 2004. *Managing urban stormwater: soils and construction*, Volume 1, March 2004, 4th edition.

Wentworth Shire Council (2015), Buronga Landfill, Landfill Environmental Management Plan, December 2015, Ref: 21/21400/181846.

GHD (2012). Buronga Landfill Geotechnical Investigation Report, Wentworth Shire Council, 05 November 2012, Ref: 21/21400/181848.

Tonkin (2021), Buronga Landfill Expansion Geotechnical Investigation Report, 11 June 2021, Ref: 202597R02A.

Tonkin (2022), Buronga Landfill Expansion Environmental Impact Statement, SSD-10096818, 25 January 2022, Ref: 202597R04Rev1. (the expansion development EIS)

Tonkin (2022), Buronga Landfill Expansion Submission Report, SSD-10096818, 1 December 2022, Ref: 202597R05Rev2.

Tonkin (2023), Buronga Landfill Expansion Amendment Report, SSD-10096818, 8 February 2023, Ref: 202597R07Rev0.

Tonkin (2023), Buronga Landfill Expansion Groundwater Impact Assessment, 19 September 2021, Ref: 202597R03Rev0.

1.8 Consultation

In accordance with Development Consent (SSD_10096818) Condition A11, the draft of this Erosion and Sediment Control Plan was provided to the EPA for consultation.



2 Site Overview

2.1 Surface Water

The closest surface water bodies are Gol Gol Lake, approximately 1.5 km east, and the Murray River, over 5 km south. There is no direct waterway or pathway from the Project area to either of the mentioned water bodies. The site is outside the flood planning area defined in the Wentworth LEP 2011. The lack of surface water bodies and defined drainage is not unexpected given the gently undulating to flat topography and low rainfall (274 mm average annual rainfall).

Surface water at the site naturally flows eastward, towards Lake Gol Gol, navigating around embankments and the base of the landform before reaching a sediment pond located in the southeast corner of the site. The site's lowest elevation is situated at the eastern toe of the landfill at RL 35 m. Natural slopes across the site range from approximately 2% to 6%.

2.2 Stormwater Infrastructure

The existing stormwater sedimentation basin is located at the south east of the site.

The location of the basins for Stage 1 as well as the other Erosion and Sediment Control measures are shown in Figure 7 of Appendix A. The locations have been selected to allow for gravity flow to the basins whilst minimising the potential impact on vegetation by selecting already cleared areas and/or minimising the footprint as far as practical for the north-eastern basins where higher quality vegetation was found. Associated stormwater drains directing stormwater towards stormwater basins are designed and to be constructed.

The basin sizes required for the development are described in Table 2-1.

Table 2-1 Stormwater Basins for Buronga Landfill

Basin	Area (ha)	Settling Zone Volume (m ³)	Sediment Storage Volume (m ³)	Total Basin Volume (m ³)
Stage 1 North Western	17.1	1493	746	2239
Stage 1 North Eastern	4.3	376	188	564
Stage 1 Southern	20.0	1743	872	2615

2.3 Erosion and Sediment Control Plan

The required outcomes of stormwater management according to The Landfill Guidelines are:

Controls must be implemented to minimise erosion and reduce the sediment load (suspended solids) of stormwater discharged from the site.

There are four main types of stormwaters generated on the site:

- Clean stormwater runoff from undisturbed and rehabilitated/revegetated areas of the site;
- Potentially sediment laden stormwater runoff from disturbed, but non-waste handling & storage areas of the site;
- Potentially contaminated stormwater runoff from the CRC, waste storage and waste transfer areas; and
- Leachate contaminated stormwater runoff from the active landfilling area and the composting pad;



The fundamental approach to the management of stormwater on site is as follows:

- Minimise the generation of sediment laden stormwater generated on site by implementing control measures as below;
- Ensure that water that falls on the FERF and the CRC, waste storage and waste transfer areas is captured and does not leave the site untreated, such by placing bunding around this area and directing this water to a sedimentation basin or other collection area;
- Ensure that water falling in the active landfilling area and the composting area is captured and is managed in the same way as leachate, ensuring that it does not leave site and is managed in an environmentally appropriate way;
- Ensure separation of stormwater flows from leachate.

WSC will continue to minimise the generation of sediment laden stormwater generated on site.

Measures for controlling erosion on site and minimising the generation of sediment laden stormwater will be generally adopted in accordance with the Landfill Guidelines:

- Minimise the area of exposed soils (disturbed area) that could generate suspended solids when exposed to runoff;
- Stabilise exposed areas; WSC will stabilise exposed areas of the landfill as soon as possible, primarily through revegetation, but other measures may be adopted;
- Reduce erosive effect of stormwater by ensuring that runoff from disturbed areas is either diffuse as possible or is concentrated in constructed channels;
- Protect stockpiles such as by locating them away from concentrated stormwater flows;
- Manage unsealed roads such as by providing constructed stormwater drainage and appropriate erosion and sediment controls;
- Control site operational exits where necessary with appropriate controls such as shaker ramps, rock aprons and wheel wash systems to prevent off-site transport of suspended solids; and
- WSC will inspect all erosion control structures (both temporary and permanent) regularly and after any significant rainfall events (>10 mm in a day).

Stormwater will continue to be diverted away from any area where waste is stored or has been landfilled. The EPL requires that stormwater from a 24 hour rainfall event up to 174.5 mm (a 1 in 10 year recurrence interval event of 24 hours duration) will be diverted away from any area used for the irrigation of leachate.

For the purposes of defining an area as 'revegetated'; the NSW Landfill Guidelines defines a revegetated area producing 'clean' runoff as an area where approximately 70% of groundcover has been re-established.

Where the area drained is undisturbed and runoff is not contaminated by sediment or waste, this stormwater will be drained from the site. Where the area drained is likely to contribute sediment to the stormwater, this water will be drained either to a sediment basin or will be spread over vegetated areas of the site to enable the settlement of sediments from the water. Where this is not possible, sediment control measures will be installed as a temporary measure. Surface water from the site is directed to a sedimentation basin in the north-eastern corner of the site. WSC will ensure that all sediment laden stormwater does not leave site prior to the removal of suspended solids from this water.

Any required temporary open drains will be constructed at grades typically no steeper than 3% to minimise scouring. Where drain slopes exceed 3% the drains shall be suitably lined with crushed rock, grassed or otherwise stabilised to prevent erosion. All drainage structures will continue to be designed in accordance with the relevant design criteria including those specified in the Landfill Guideline and the NSW DECC Stormwater Management Guideline for waste landfills¹ (The Blue Book). Where required, approvals licences will be obtained for the drainage structures from the appropriate approval authority.

¹ NSW DECC, 2008, Managing Urban Stormwater: Soils and Construction, Volume 2B Waste Landfills, NSW Department of Environment and Climate Change, Sydney, 1 June 2008.



A stormwater management plan is to be developed for the site that will guide the requirements for any future stormwater controls.

2.3.1.1 Stormwater and Sediment Management

Stormwater runoff from disturbed areas is detained on site to prevent the discharge of any sediment laden water from site. Stormwater shall only be released from site once the water quality is suitable for discharge. Sediment basins and associated grass-lined swales are used to treat sediment-laden water and are required for Stage 1 of landfill development. It is assumed that diversion swales for clean water will be developed as part of the detailed design for cell construction. The basin sizes required for the development are described in Table 2-1 in Section 2.2 with detailed calculations based on "The Blue Book" (Landcom, 2004).

2.3.1.2 FREF, CRC, Waste Drop-off and Waste Storage Runoff

Stormwater runoff from the FREF, the CRC, waste transfer and waste storage areas is considered to include all water that has not come into contact with waste. Any water that comes into contact with stockpiled waste, including green waste, scrap metal, concrete, tyres and mattresses is considered to be leachate and will be directed to the leachate collection system.

WSC will minimise the generation of leachate in the FREF, the CRC, waste transfer and waste storage areas through the following measures:

- All waste for recycling with the exception of stockpiles of green waste, scrap metal, concrete, tyres and mattresses will be stored under cover to prevent water coming into contact with these wastes; and
- Stockpiles of material stored outside must be protected from stormwater by:
 - Diverting upstream stormwater with up-slope diversion banks. Stockpiles of soil may be stabilised with vegetative cover, mulches or matting where appropriate and be provided with sediment control fencing.
 - Minimising the size of the stockpiles of green waste, scrap metal, concrete, tyres and mattresses.
 - Any stormwater generated from rain falling on these stockpiles must be captured in stormwater drains and directed to the sedimentation basins of site. Surface water from the site is directed to a sedimentation basin in the south eastern corner of the site.

2.3.1.3 Separation of Stormwater from the Active Landfill Area

Any water coming into contact with waste becomes leachate and must be directed to the leachate collection system for appropriate storage and disposal. WSC are required to minimise the generation of leachate at the site, to achieve this stormwater must be prevented from contacting waste. To prevent this from occurring WSC must continue to:

- Construct bunds and diversion drains to prevent run-off from upslope areas from entering the active landfill area;
- Ensure that waste placement is kept to the sub-cells as nominated in the filling plans;
- Place all waste to be landfilled inside the bunded areas protected from stormwater run-on; and
- Ensure that stormwater is prevented from entering the leachate collection system, including drains and the leachate pond.

2.3.1.4 Maintenance

All stormwater drainage works will be maintained in proper working order so as to:

- Minimise flooding of the landfill site; and
- Prevent contamination of local groundwater and surface water.

Maintenance will include:

- Regular cleaning of drains/pipes/pits and removal of accumulated sediments;



- Removal of flow concentrations from disturbed areas and remediation of any erosion; and
- Stabilisation of eroded drains.

Monitoring of surface water will continue to be implemented to evaluate the effectiveness of the stormwater erosion and sediment control measures.



3 Reporting

3.1 Annual Reporting

WSC will prepare an Annual Return in accordance with the requirement of the EPL. The Annual Return will include the following:

- A certified Statement of Compliance,
- A signed Monitoring and Complaints Summary,
- A Statement of Compliance for Licence Conditions,
- A Statement of Compliance for Load Based Fee,
- A Statement of Compliance for Requirement to Prepare Pollution Incident Response Management Plan,
- A Statement of Compliance for Requirement to Publish Pollution Monitoring Data; and
- A Statement of Compliance for Environmental Management Systems and Practices.

The Annual Return will be prepared for the required reporting period, and will be submitted to the EPA no later than 60 days after the end of the reporting period. WSC will retain a copy of the Annual Return for a period of at least 4 years after the Annual Return is supplied to the EPA.

The Annual Return will be prepared for the required reporting period and will be submitted to the EPA no later than 60 days after the end of the reporting period. WSC will retain a copy of the Annual Return for a period of at least 4 years after the Annual Return is supplied to the EPA.

The monitoring and complaints summary will contain the following information:

- Tabulated results of all monitoring information collected;
- Graphical presentation of data from at least the last three years in order to show variability/and or trends. Any statistically significant variations or anomalies will be highlighted and explained;
- An analysis and interpretation of all monitoring data;
- An analysis of and response to any complaints received;
- Identification of any deficiencies in environmental performance identified by the monitoring data, trends or incidents and of remedial action taken or proposed to be taken to address these deficiencies; and
- Recommendations on improving the environmental performance of the facility.

The monitoring and complaints summary must be signed by WSC or by a person approved in writing by the EPA to sign on behalf of the Licence holder.

3.2 Incident Reporting

Any incident that causes or threatens material harm to the environment or may lead to a breach of EPL conditions must be communicated by WSC or its employees immediately after first becoming aware of the incident. Notifications must be made by telephoning the Environment Line service on 131 555. The Planning Secretary must be notified in writing via the Major Projects website. Written notice including details of the notification must be provided to EPA within 7 days of the date of which the incident occurs. Reportable incidents could include but are not limited to:

- Identification of non-domestic quantities (>200 g/tonne) of hazardous waste mixed amongst solid waste;
- Fire at the landfill;
- Entry of leachate or waste into the stormwater management system;
- Identification of any failure of an environmental protection system;



- Identification of a significant difference in groundwater or stormwater indicator parameters; and
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

The occurrence of any such incident will also be recorded in the site's daily logbook as appropriate.

As required in the development consent, the written incident notification shall be provided to the Planning Secretary within seven days after WSC becomes aware of an incident. The written notification must:

- identify the development and application number;
- provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- identify how the incident was detected;
- identify when the applicant became aware of the incident;
- identify any actual or potential non-compliance with conditions of consent;
- describe what immediate steps were taken in relation to the incident;
- identify further action(s) that will be taken in relation to the incident; and
- identify a project contact for further communication regarding the incident.

Within 30 days of the date on which the incident occurred, WSC must provide the Planning Secretary and the EPA with a detailed report on the incident addressing all requirements below, and such further reports as may be requested. The Incident Report must include:

- a summary of the incident;
- outcomes of an incident investigation, including identification of the cause of the incident;
- details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- details of any communication with other stakeholders regarding the incident.

Where an authorised officer of the EPA suspects on reasonable grounds that an event has occurred at the premises that has caused, is causing or is likely to cause material harm to the environment, the authorised officer may request a written report of the event. WSC must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request. The report may be required to contain any or all of the following information:

- The cause, time and duration of the event;
- The type, volume and concentration of every pollutant discharged as a result of the event;
- The name, address and business hours telephone number of employees or agents of the WSC, or a specified class of them, who witnessed the event;
- The name, address and business hours telephone number of every other person who witnessed the event, unless WSC cannot obtain that information after making reasonable effort;
- Action taken by WSC in relation to the event, including any follow up contact with complainants;
- Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
- Any other relevant matters.

The EPA and/or the Planning Secretary may make a written request for further details in relation to any of the above matters if it's not satisfied with the report provided by WSC. WSC must provide such further details to the EPA and/or the Planning Secretary within the time specified in the request.



3.3 Compliance Reporting

Within six months after the commencement of construction / first year of commencement of operation of the site expansion development, and in the same month each subsequent year, WSC will submit a Compliance Report to the Planning Secretary reviewing the environmental performance of the development to the satisfaction of the Planning Secretary.

Compliance Reports will be prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2020) and will also:

- identify any trends in the monitoring data over the life of the development;
- identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next year to improve the environmental performance of the development.

WSC will make each Compliance Report publicly available within 60 days after submitting it to the Planning Secretary and notify the Planning Secretary in writing at least seven days before this is done.

3.4 Independent Audit

Within one year of the commencement of operation of the site expansion development, and every three years after, unless the Planning Secretary directs otherwise, WSC will prepare an Independent Environmental Audit (Audit) of the development.

Audits will:

- be prepared in accordance with the Independent Audit Post Approval Requirements (Department 2020);
- be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; and
- be submitted to the satisfaction of the Planning Secretary within three months of commissioning the Audit (or within another timeframe agreed by the Planning Secretary).

WSC will:

- review and respond to each Independent Audit Report prepared under the condition as required in the development consent;
- submit the response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations;
- implement the recommendations to the satisfaction of the Planning Secretary; and
- make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary and notify the Planning Secretary in writing at least 7 days before this is done.

3.5 Record Keeping

The following records shall be kept at the legal address of the site Licensee:

- Copy of conditions of planning consent and authorisation under the *Amended Environmental Planning and Assessment Act 1979*;
- Records of inspections conducted by staff;
- Records of monitoring as discussed above;
- Records of complaints received;
- Correspondence with or records of inspections by EPA;
- Records of situations where licence conditions have been breached and how the breaches were rectified;



- Copy of LEMP in its entirety;
- The site's EPL;
- Site diary/daily log-book;
- Plans of waste storage locations for future possible retrieval;
- Worksite WHS field folder
- Any other applicable Council operational plans and policies including closure and post closure management plans (when developed);
- Copies of any site reporting; and
- Evidence and outcomes of site reviews.

WSC shall ensure that the above records are kept up to date and readily accessible for future reference.



4 Contingency Plan

This Contingency Plan outlines the procedures to be followed in the event of a failure of erosion or sediment control measures at the site. The objective is to ensure prompt and effective actions are taken to minimise environmental impacts and restore the functionality of control systems.

4.1 Incident Detection and Immediate Actions

Regular inspections, particularly after significant rainfall events (greater than 10mm in 24 hours), will help identify failures or issues in erosion and sediment control measures. Areas prone to erosion, such as exposed soils or disturbed areas, will be inspected regularly.

Upon detection of a failure (e.g., a breach in a silt fence, overflow of a sediment basin), the following steps will be taken:

- Temporary erosion and sediment control measures, such as sandbags, additional bunding, or temporary silt fencing, will be installed immediately to contain the issue.
- The Site Manager will coordinate with site personnel to implement repairs to the failed structures as soon as possible to prevent further sediment runoff or erosion.

4.2 Notification and Reporting

The Site Manager will be notified immediately upon identification of any significant failure of erosion or sediment control measures to ensure that a coordinated response is initiated.

4.3 Mitigation and Remediation Actions

Immediate steps will be taken to control sediment runoff or erosion, including the installation of temporary barriers or bunding. Sediment basins will be checked to ensure they can handle additional runoff and that any accumulated sediment is removed as needed to maintain capacity.

A remediation plan will be implemented to restore affected areas, which may include regrading or repairing damaged structures.

4.4 Review and Continuous Improvement

After the incident, a review will be conducted to evaluate the cause of the failure and identify areas for improvement. This review will include an assessment of the effectiveness of the response actions and any necessary updates to the erosion and sediment control measures.

The Erosion and Sediment Control Plan will be updated if necessary to incorporate lessons learned and to prevent future failures.

4.5 Emergency Response Plan

The site's Emergency Response Plan includes detailed procedures for handling incidents such as spills, fires, and other emergencies. The Site Manager and operational staff are responsible for implementing this plan, coordinating with external emergency services as needed. The plan is reviewed regularly to ensure its continued relevance and effectiveness.



5 Continuous Improvement Program

The Continuous Improvement Program for the Erosion and Sediment Control Plan at Buronga Landfill ensures that erosion and sediment control measures remain effective and aligned with best practices. Continuous improvement will be achieved through regular reviews and assessments of site conditions and operational practices.

5.1 Objectives

The objectives of the Continuous Improvement Program are:

- To ensure that erosion and sediment control measures are consistently effective in managing site conditions.
- To incorporate industry best practices and new technologies where feasible to reduce the risk of erosion and sediment transport.
- To address any issues identified during routine inspections or incidents to improve the overall performance of control measures.

5.2 Regular Inspections and Assessment

Regular site inspections will continue to be an essential part of the continuous improvement process. These inspections will help identify:

- Areas that may require additional erosion or sediment control measures.
- Any degradation or failure of existing control structures that require maintenance or enhancement.
- Opportunities to refine control measures to better suit site-specific conditions.

5.3 Incorporation of Best Practices

The Erosion and Sediment Control Plan will be updated as necessary to reflect advancements in industry best practices. This may include:

- New methods of soil stabilisation or sediment control.
- Improved materials or techniques for stormwater diversion or sediment capture.
- Modifications to site management practices based on lessons learned from past performance.

5.4 Corrective Actions

If issues are identified during inspections or as a result of an incident, corrective actions will be implemented promptly. These actions may include:

- Repairing or reinforcing erosion and sediment control structures.
- Adjusting site operations to minimise further erosion or sediment transport.
- Revising the Erosion and Sediment Control Plan to incorporate any necessary improvements.

5.5 Periodic Review

The Erosion and Sediment Control Plan will undergo periodic reviews to assess its effectiveness and relevance to current site conditions. The plan will be reviewed every three years or after significant changes to site operations, regulatory requirements, or following any major incident. The review process will involve:

- Evaluating the performance of control measures during routine site operations and following significant rainfall events.
- Identifying any areas for improvement and implementing necessary updates to the plan.



6 Plan Review Protocol

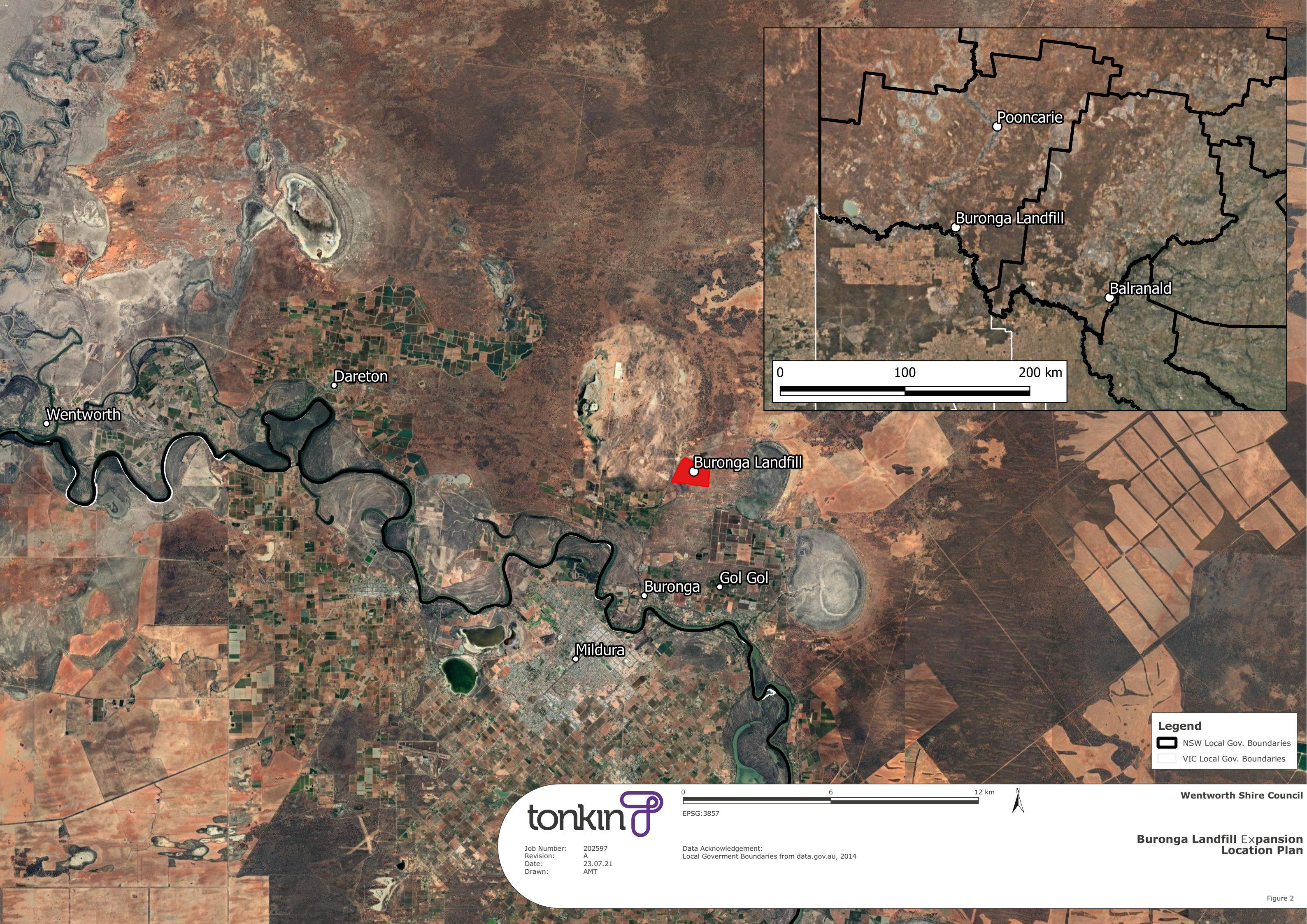
The Erosion and Sediment Control Plan will undergo a formal review every three years or following significant changes in site operations, regulatory requirements, or after any major incident. Any revisions will be submitted to the EPA for approval.



Appendix A – Figures



Figure 2: Regional Location Plan



Wentworth

Dareton

Buronga Landfill

Buronga

Gol Gol

Mildura

Pooncarie

Buronga Landfill

Balranald

0 100 200 km

Legend
 [Black Outline] NSW Local Gov. Boundaries
 [White Outline] VIC Local Gov. Boundaries

tonkin

0 6 12 km
 EPSG:3857



Job Number: 202597
 Revision: A
 Date: 23.07.21
 Drawn: AMT

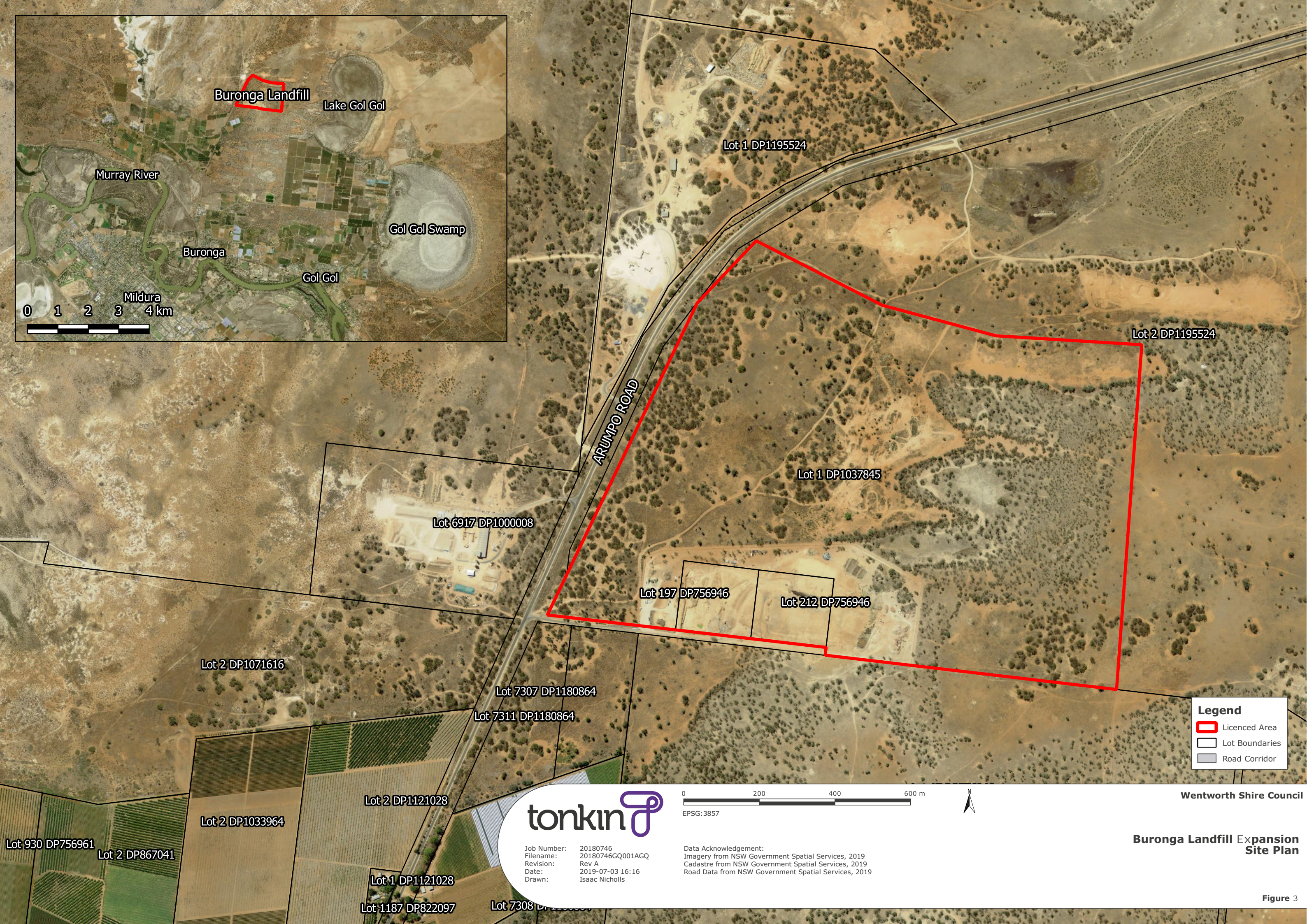
Data Acknowledgement:
 Local Government Boundaries from data.gov.au, 2014

Wentworth Shire Council

**Buronga Landfill Expansion
 Location Plan**



Figure 3: Site Location Plan



Legend

- Licenced Area
- Lot Boundaries
- Road Corridor

tonkin

Job Number: 20180746
 Filename: 20180746GQ001AGQ
 Revision: Rev A
 Date: 2019-07-03 16:16
 Drawn: Isaac Nicholls

Data Acknowledgement:
 Imagery from NSW Government Spatial Services, 2019
 Cadastre from NSW Government Spatial Services, 2019
 Road Data from NSW Government Spatial Services, 2019

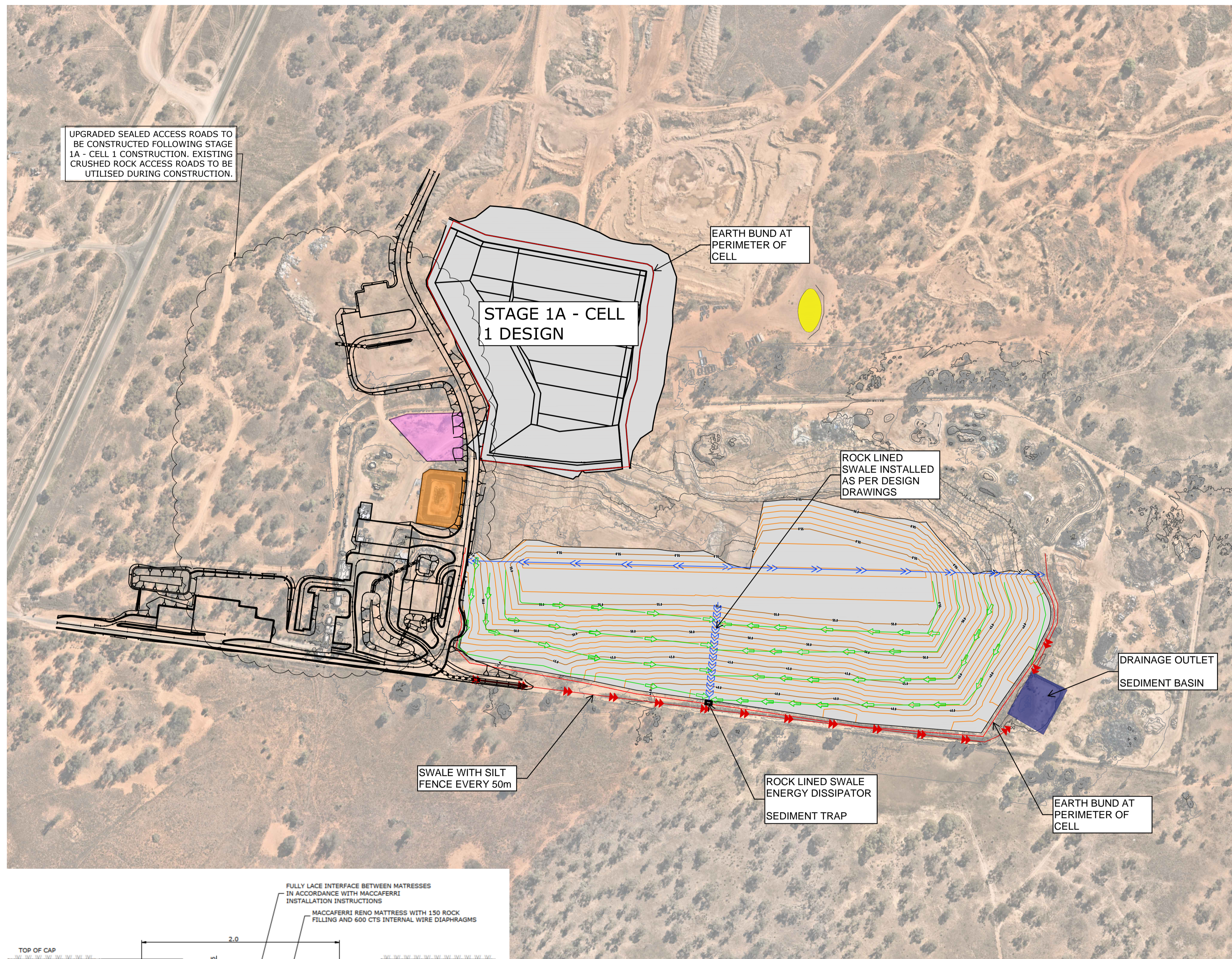
0 200 400 600 m
 EPSG:3857

Wentworth Shire Council

Buronga Landfill Expansion Site Plan



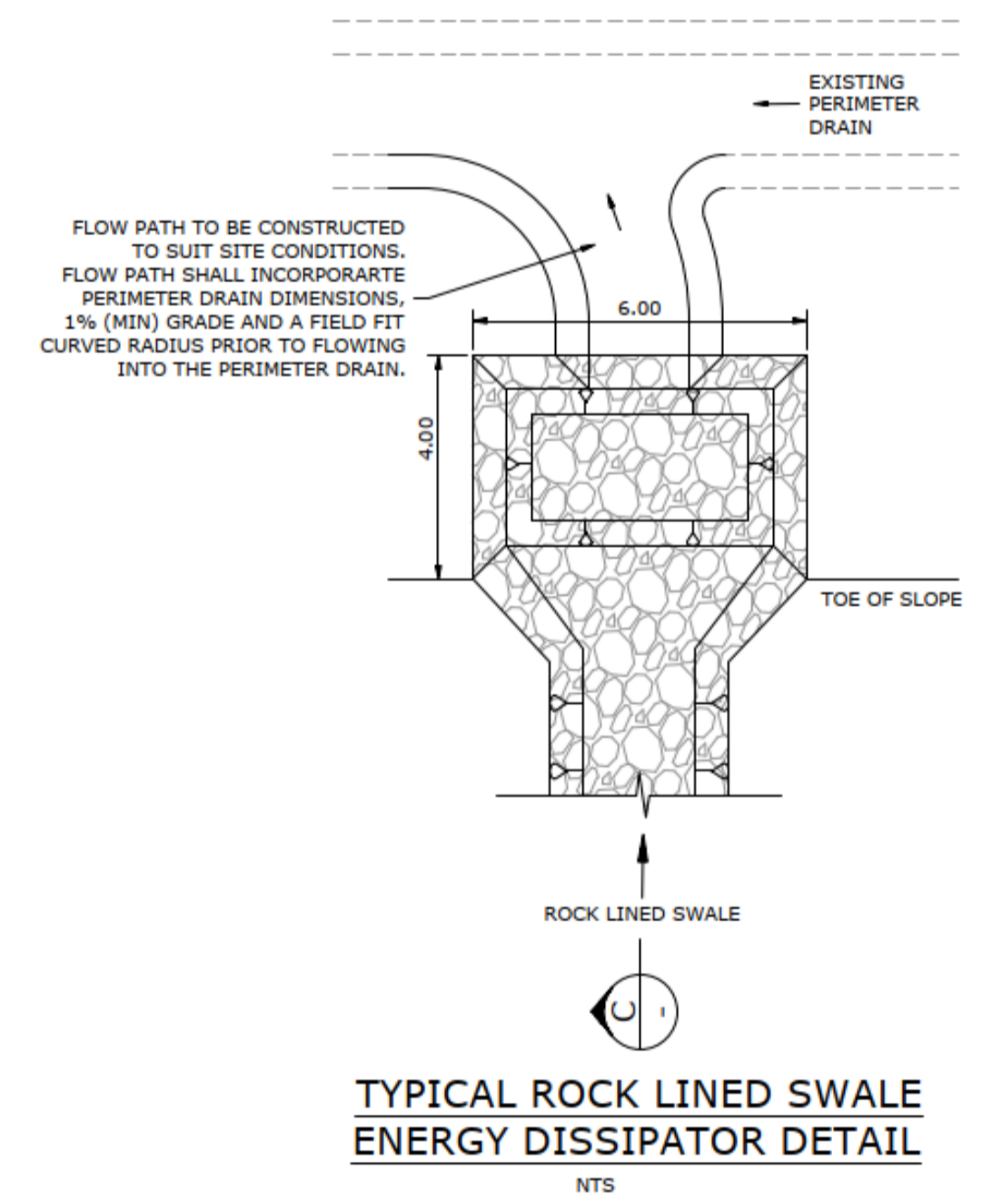
Figure 4: Current Erosion and Sediment Control Plan



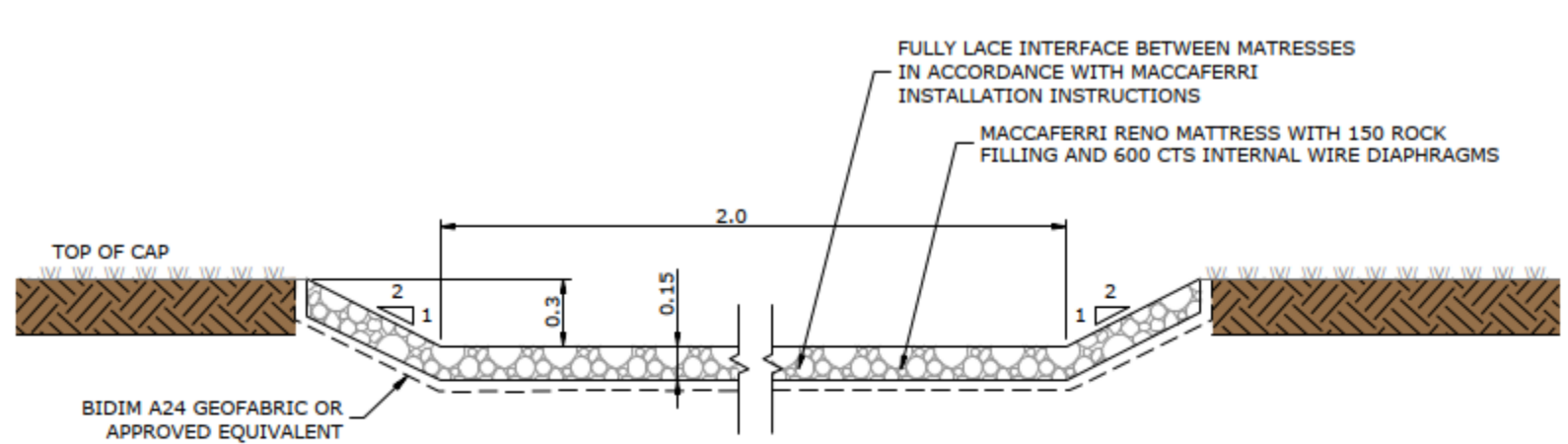
LEGEND

- PROPOSED EARTHEN BUND (>200mm HEIGHT)
- EXISTING LEACHATE POND
- PROPOSED SITE LAYDOWN
- PROPOSED SEDIMENT BASIN/SILT TRAP
- SILT FENCE
- PROPOSED STOCKPILE LOCATION (INDICATIVE ONLY)

- NOTES:**
1. ALL TEMPORARY CONSTRUCTION ROADS TO BE CONSTRUCTED WITH CRUSHED ROCK TO PREVENT SEDIMENT RUNOFF AND EROSION.
 2. EARTHEN BUND AROUND PERIMETER OF PHYTOCAP DURING CONSTRUCTION TO REDUCE RISK OF LEACHATE CONTAMINATED STORMWATER ENTERING THE STORMWATER SYSTEM. ALL STORMWATER LANDING ON THE ACTIVE LANDFILL TO BE TREATED AS LEACHATE.
 3. EARTHEN BUND AROUND PERIMETER OF PROPOSED CELL DURING CONSTRUCTION TO REDUCE RISK OF EROSION OF CELL WALLS PRIOR TO PLACEMENT OF LINING.
 4. SITE LAYDOWN AREA TO BE CONSTRUCTED WITH CRUSHED ROCK TO PREVENT SEDIMENT RUNOFF AND EROSION.
 5. SEDIMENT BASIN TO BE CLEARED OF SEDIMENT AS REQUIRED TO ENSURE SUFFICIENT CAPACITY AT ALL TIMES.
 6. MATERIAL STOCKPILES TO BE LOCATED AWAY FROM CONCENTRATED STORMWATER FLOWS.
 7. SWALES TO BE CONSTRUCTED ADJACENT ALL CONSTRUCTION ROADS.
 8. SILT FENCES TO BE INSTALLED IN SWALES EVERY 50m.



TYPICAL ROCK LINED SWALE ENERGY DISSIPATOR DETAIL

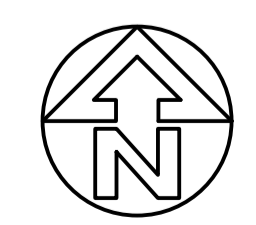


TYPICAL ROCK LINED SWALE SECTION

NOTE:
RENO MATTRESS SHALL BE LAID WITH 6m LONG DIMENSION OF MATTRESS LAID IN THE DIRECTION OF FLOW.

0 20 40 80 120
1 : 2,000m (A1) - 1 : 4,000m (A3)

SHEET SIZE
A1



COORDS: GDA2020 MGA ZONE 54 DATUM: ALL LEVELS TO A.H.D.			
SCALE:			
SURVEYED: NA SURVEY DATE: NA			
APPROVED / PROJECT LEADER			
ANDREW SEATON-STEWART			
A FOR INFORMATION	20.09.24	S.S.	A.A.
REV AMENDMENT / REASON FOR ISSUE	DATE	DES.	DWN.

PUBLIC UTILITIES:
THE SERVICES SHOWN ARE DERIVED FROM PLANS OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE WITH THE RELEVANT SERVICE AUTHORITIES FOR CONFIRMATION OF SERVICES AND THEIR LOCATION BEFORE EXCAVATION WORK COMMENCES.



NOT FOR CONSTRUCTION

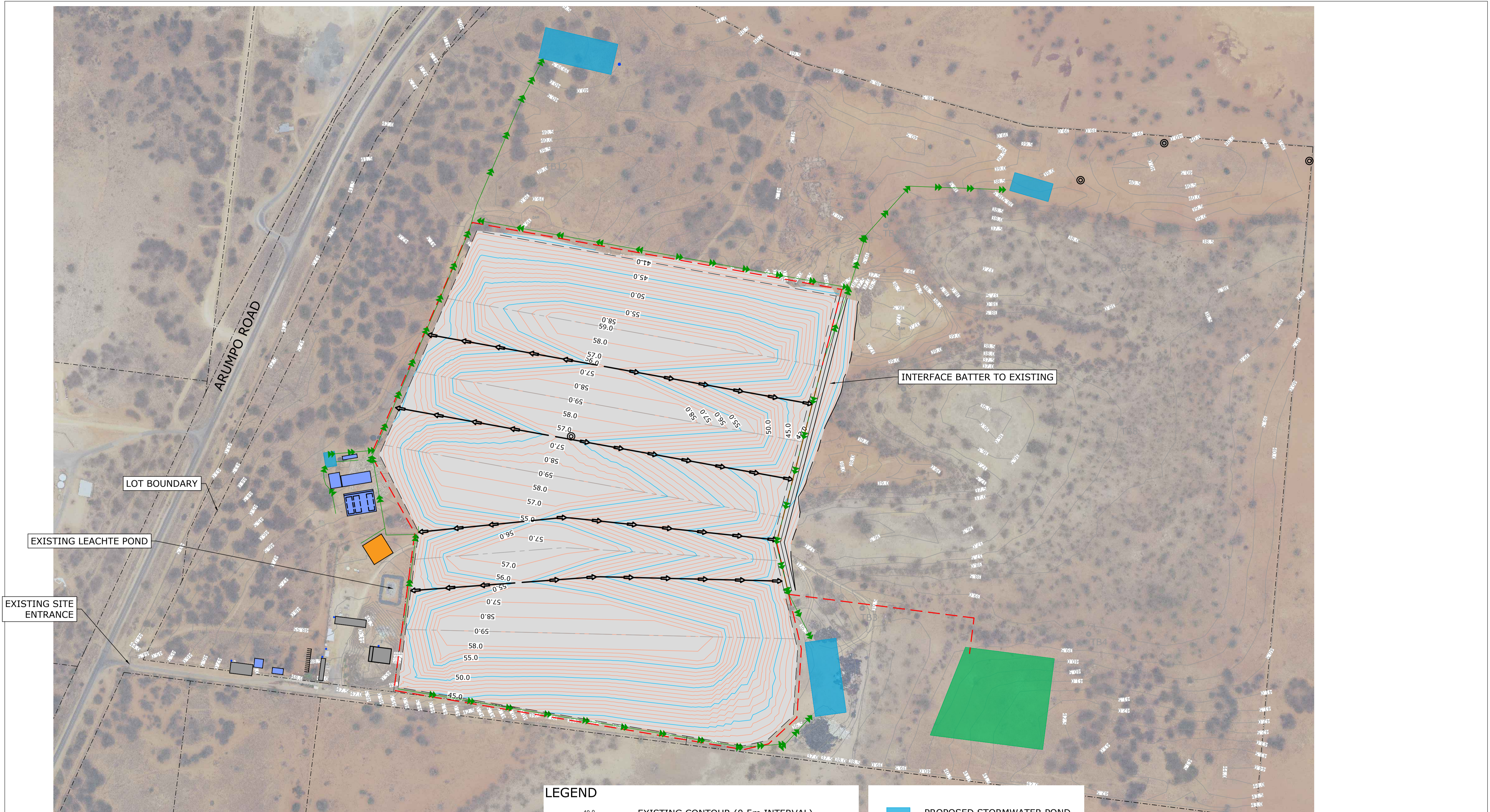
WENTWORTH SHIRE COUNCIL
BURONGA LANDFILL EXPANSION
FIGURE 4
SEDIMENT AND EROSION CONTROL PLAN

FILENAME: 240929 SEDIMENT AND EROSION CONTROL PLAN.DWG	PROJECT NUMBER 240929	DRAWING NUMBER SK006	REVISION A
---	---------------------------------	--------------------------------	----------------------

THIS DRAWING IS TO BE VIEWED IN COLOUR AS SOME FEATURES / SYMBOLS ARE DIFFERENTIATED BY COLOUR. DRAWING NOT TO BE RELIED ON IF PRINTED IN GREYSCALE.



Figure 8: Stormwater, Erosion and Sediment Control Stage 1



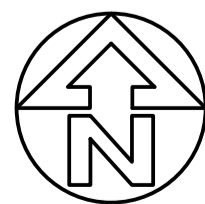
- LEGEND**
- 40.0 — EXISTING CONTOUR (0.5m INTERVAL)
 - 51.0 — DESIGN CONTOUR MAJ (5.0m INTERVAL)
 - 50.1 — DESIGN CONTOUR MIN (1.0m INTERVAL)
 - - - - - PROPOSED STAGE BOUNDARY
 - ▲—▲— PROPOSED CAP CROWN
 - ▲—▲— PROPOSED CAP DRAIN
 - ▲—▲— PROPOSED STORMWATER DRAIN
 - - - - - PROPOSED STAGE 1 SERVICE ALIGNMENT
 - PROPOSED STORMWATER POND
 - PROPOSED LEACHATE POND
 - ⊙ ABORIGINAL ARTIFACT SITE
 - PROPOSED BUILDING OR SHED
 - PROPOSED HARDSTAND AREA
 - PROPOSED LFG AREA (FUTURE)

0 25 50 100 150
1:2500 (A1); 1:5000 (A3)

100mm ON ORIGINAL DRAWING - DO NOT SCALE DRAWING

SHEET SIZE
A1

COORDS: MGA94 ZONE 54
DATUM: ALL LEVELS TO A.H.D.
SCALE: 1:2500
SURVEYED: PRICEMERRET
SURVEY DATE: 03.03.21
APPROVED / PROJECT LEADER
MEL SALT



PUBLIC UTILITIES:
THE SERVICES SHOWN ARE DERIVED FROM PLANS OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE WITH THE RELEVANT SERVICE AUTHORITIES FOR CONFIRMATION OF SERVICES AND THEIR LOCATION BEFORE EXCAVATION WORK COMMENCES.



NOT FOR CONSTRUCTION
WENTWORTH SHIRE COUNCIL BURONGA
LANDFILL EXPANSION FIGURE 8
STORMWATER/ EROSION AND SEDIMENT
CONTROL STAGE 1

THIS DRAWING IS TO BE VIEWED IN COLOUR AS SOME FEATURES / SYMBOLS ARE DIFFERENTIATED BY COLOUR. DRAWING NOT TO BE RELIED ON IF PRINTED IN GREYSCALE.

REV	AMENDMENT / REASON FOR ISSUE	DATE	DES.	DWN.
C	ISSUED FOR APPROVAL	8.2.23	IN	JDT
B	ISSUED FOR INFORMATION	10.8.22		
A	FOR INFORMATION	14.09.21		

FILENAME:	PROJECT NUMBER	DRAWING NUMBER	REVISION
202597 CONCEPT DESIGN.DWG	202597	07	C