



Pollution Incident Response Management Plan (PIRMP)

Lake George Mine Rehabilitation, Captains Flat



The Soil Conservation Service acknowledges the traditional custodians of the land where we live and work and pays respect to Elders past, present and emerging. Through our work on what was and always will be Aboriginal land, we commit to our shared responsibility to heal and protect Country for all future generations.



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More information

Document build

Version	Date	Author/Reviewer	Details/sections changed
0.1	15/11/2023		All – Concept for review
0.2	17/11/2023		All – Changes to communications and actions
0.3	17/11/2023		*Commentary provided via teams meeting further recommendations of communications and actions procedures
0.4	27/11/2023		For review
0.4	28/11/2023		*Commentary provided marked up PDF document
0.5	28/11/2023		Sent for Review –
0.6	30/11/2023	S	For application

Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing, December 2023. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Soil Conservation Service or the user's independent adviser.

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1. Purpose

Department of Regional NSW holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for Lake George Mine, Captains Flat. As per the Protection of the Environment Operations Act 1997 (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test, and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

If a pollution incident occurs during an activity so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, the person carrying out the activity must immediately implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

A copy of this plan must be kept at the licensed premises, or where the activity takes place in the case of mobile plant licences and be made available on request by an authorised EPA officer and to any person who is responsible for implementing this plan.

Parts of the plan must also be available either on a publicly accessible website, or if there is no such website, by providing a copy of the plan to any person who makes a written request. The sections of the plan that are required to be publicly available are set out in section 74 of the Protection of the Environment Operations (General) Regulation 2022.

Note: This plan must be developed in accordance with the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (General) Regulation 2022.

Licensees should also refer to the EPA's Guideline 2022: Pollution incident response management plans.

2. Environmental Protection License (EPL) details

Name of Licensee

Department of Regional NSW

ABN: 19948325463

EPL Number

21721

Premises name and address

Lake George Mine. Miners Road, Captains Flat NSW 2623

Website address:

https://www.scs.nsw.gov.au

Scheduled activity/activities on EPL

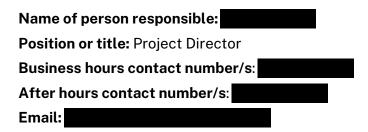
- Establishment of the site office;
- Preparation of bunded lay down area;
- Importation and stockpiling of imported clean remedial materials (i.e. subsoil, topsoil, lime, alternative liming product etc.) to be stored in the bunded lay down area;
- Preparation of the Northern Dumps access track;
- Geotechnical investigations;
- Installation and maintenance of erosion and sediment controls across the whole site to prevent the pollution of waters.

3. Scope

If Soil Conservation Service identifies through routine or event-based monitoring that a pollution incident has occurred within the Captains Flat Project site such that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, construction activity contributing to the pollution incident must immediately cease until appropriate control measures are deemed effective.

3.1. Responsibilities

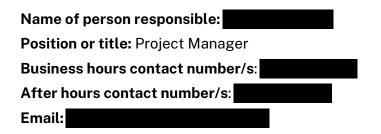
3.1.1. SCS PIRMP activation



3.1.2. Notifying relevant authorities

Name of person responsible:	
Position or title: Project Director	
Business hours contact number/s:	
After hours contact number/s:	
Email:	

3.1.3. Managing response to pollution incident



3.2. Notifications and Communications

3.2.1. Notification of relevant authorities

Table 1. Relevant Authorities

Authority	Contact Information
Environmental Protection Agency (EPA)	Ph: 131 555
Safework NSW	Ph: 131 050
Queanbeyan Palerang Regional Council	Ph: 1300 735 025
Water NSW	Ph: 1800 061 069
Department of Fisheries	Ph: (02) 4478 9100
Department of Environment & Heritage	Ph: 1300 361 967
NSW Health – Goulburn Public Health Unit (closest public health unit)	Ph: (02) 4825 4944
NSW Fire & Rescue/ NSW RFS	Ph: 000

3.2.2. Notification of neighbours and the local community

Resident	Contact Information	Method of Contact	
8 Copper Creek Rd, Captains Flat		Phone call/door knock	
5 Old Mines Rd, Captains Flat		Phone call/door knock	
44 Old Mines Rd, Captains Flat		Phone call/door knock	
66 Old Mines Rd, Captains Flat Phone call/door kr		Phone call/door knock	
NSW State Emergency Service (Queanbeyan)	Ph: 13 25 00	Phone call	
Department of Education (Captains Flat Public School)	Ph: (02) 6236 6253	Phone call	
Palerang Regional Council Aquatics (Captains Flat Pool)	Ph: (02) 6236 6264	Phone call	
QPRC (Colin Winchester Oval)Ph: 1300 735 025Phone call		Phone call	

3.3. Description and likelihood of hazards and actions

3.3.1. Active contamination hazards

Table 3. Hazards and Impacts

Hazard description	Potential impact(s)	likelihood (High/Medium/Low)	
Uncontrolled Sediment dam discharge	Pollution of waters	High with an extended rainfall event that exceeds design storm event for basin sizing	
Uncontrolled discharge from site generally	Pollution of waters	High given no allowable discharge site methodology.	
Air pollution	Poor air quality	Medium - high winds in place/dry conditions	
Hydrocarbon/chemical spill	Soil and water contamination	Medium	
Contaminated material transit loss	Contamination outside REF	Low	

3.3.2. Pre-emptive Actions

Table 4. Hazards and Impacts

Hazard description	Pre-emptive actions
Uncontrolled Sediment dam discharge	Appropriately sized sediment basin for design rainfall or storm event set with the EPA. Appropriately designed CDU tanks to treat water to desired water quality in discussions with the EPA. Management review of TARP locations, meteorological observations and forecasts, inspection, and analysis of water storage systems pre, duration and post event
Uncontrolled discharge from site generally	Maintain site in accordance with approved Surface Water Management plan, specifically directing maximum disturbed catchment areas to basins Instigate appropriate controls at end of shift or prior to rainfall events. Minimise disturbed areas. Progressively stabilise disturbed areas.
Air pollution	Air quality monitoring, management review of monitoring locations, utilisation of trigger alarm, monitor or stop works during high winds, operator awareness and work

	methodology, utilisation of dust suppression techniques (tamping stockpiles, surface wetting, tackifiers, dust suppressants
Hydrocarbon/chemical spill	Education of staff to correct response and reporting procedure, plant maintenance records, correct storage and transportation of hydrocarbons and chemicals, pre-start checks, availability to spill kits, correct refuelling procedures, dedicated maintenance area, correct disposal of contaminated material
Contaminated material transit loss	Covered loads &/or material conditioning (wetting), site speed limits, correct operator behaviour

3.4. Inventory of Pollutants

Table 5. Pollutants Inventory

Potential pollutant/Location	Amount
Flocculant (TBA) - Sediment dams	ТВА
Fuels (TBA) and Fuel storage container at main compound area	ТВА
Alternative lime product/ Mill stockpile area	5000 m ³
In-situ contaminated soils (Lead, Zinc and associated metals)/ site wide)	70,000 m ³

3.5. Environmental Harm Minimisation

3.5.1. Insitu-Water

Water within permanent basins to be treated to allow for onsite re-use. Surface Water Management plan to reasonably consider risk of pollution event and on-ground works to ensure compliance with Surface Water Management Design. Current surface water methodology intent is not discharging any site water to the surrounding environment within design storm criteria; however, this requires further investigation for feasibility in construction phase.

3.5.2. Safety Equipment and general controls

Safety Equipment including but not limited to;

- Engagement of suitably qualified onsite occupational hygienist specialist to advice upon safe work controls for construction activities
- Site specific PPE and education on how to use correctly.
- Use of wet decontamination unit/s
- Appropriate use of Red/Green demarcation and exclusion zones
- Use of appropriate chemical dosing unit/s (CDU) for insitu water treatment
- Appropriately sized water storage systems
- Implementation of erosion and sediment controls
- Use of clean water (run-on water) diversions
- Readily available general and marine spill kits
- Complaint Fuel and Chemical Storage container
- Regular inspection regime

3.5.3. Communicating with neighbours and the local community

SCS to engage with appropriate project stakeholders to ensure regular communications to surrounding residents with information that can minimise the risk of harm and exposure to site contaminants.

Information that can minimise the risk of harm (but not limited to);

- Water Pollution: Avoid use of waters from the Molonglo River or any water stored within the site defined basins.
- Air Pollution: Avoid/limit going outside where within construction site or defined exclusion zone, if to go outside, wear a suitable PPE face mask, do not hang clothes outside to dry and thoroughly wash any home-grown fruit/vegetables before consumption, if driving through active site ensure vehicle has windows up and air conditioning on re-circulation.
- Follow instruction from construction site staff and do not enter construction site exclusion zones.

3.5.4. Minimising harm to persons surrounding the workplace.

Works to ensure that construction site activities have appropriate exclusion zones from any members of the public. Exclusion zones to be as per direction of specialist occupational hygiene specialist and onsite construction site managers. Monitoring equipment to be readily used and engaged to ensure that construction works does not adversely impact the greater surrounding environment and public.

4. Actions to be taken during or immediately after a pollution incident.

Actions taken during and immediately after;



Maintain community safety controls until pollution event has receded.

Actions taken after pollution event;

Conduct in-depth investigations to understand causation of pollution event.

Construction methodology and works operation to be then amended to practically reduce the risk of re-occurrence of pollution event to surrounding environment.

Closer out any corrective actions via an improvement request procedure

5. Coordinating with persons

Communications are to be as per section 3.1:

Project Director, , to activate the PIRMP; Project Director, , to notify relevant authorities, staff and stakeholders; Project Manager, , , to manage pollution incident;

All communications from Soil Conservation Service are to be made through the Project Director,

6. Staff Training

Pollution response to be tool-boxed in regular intervals with consideration to work sequence tasks. Staff to be educated on correct ERSED and surface water management controls. All controls to be in accordance with approved surface water management plan.

Pollution response drill to be conducted during project lifecycle to ensure compliance with this PIRMP and be tailored to appropriately manage the risks in-line with project work sequence activities.

7. Testing and updating of the PIRMP

Upkeep of Test register to track events and PIRMP testing/updates (at a minimum every 12 months or within 1 month of pollution incident). Testing and update of the PIRMP to consider the current work sequences of the project.

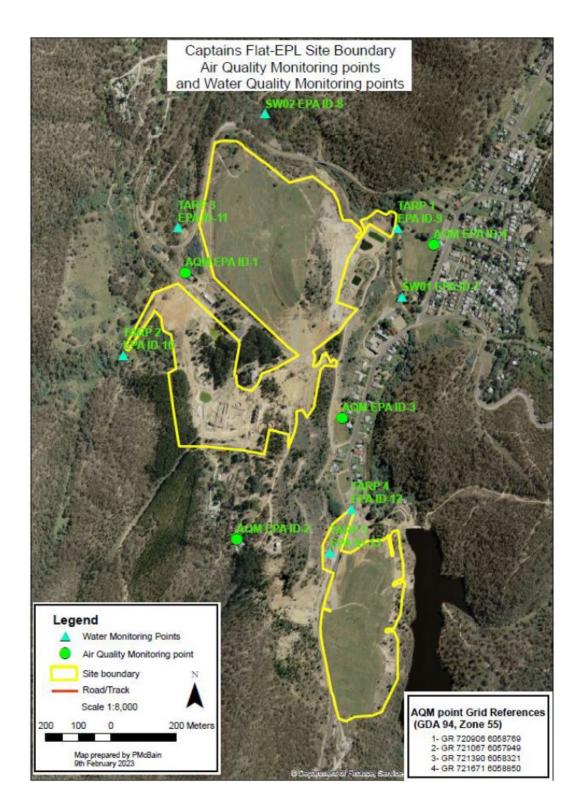
Records to be updated and stored in CM9 content manager.

Responsible personnel:

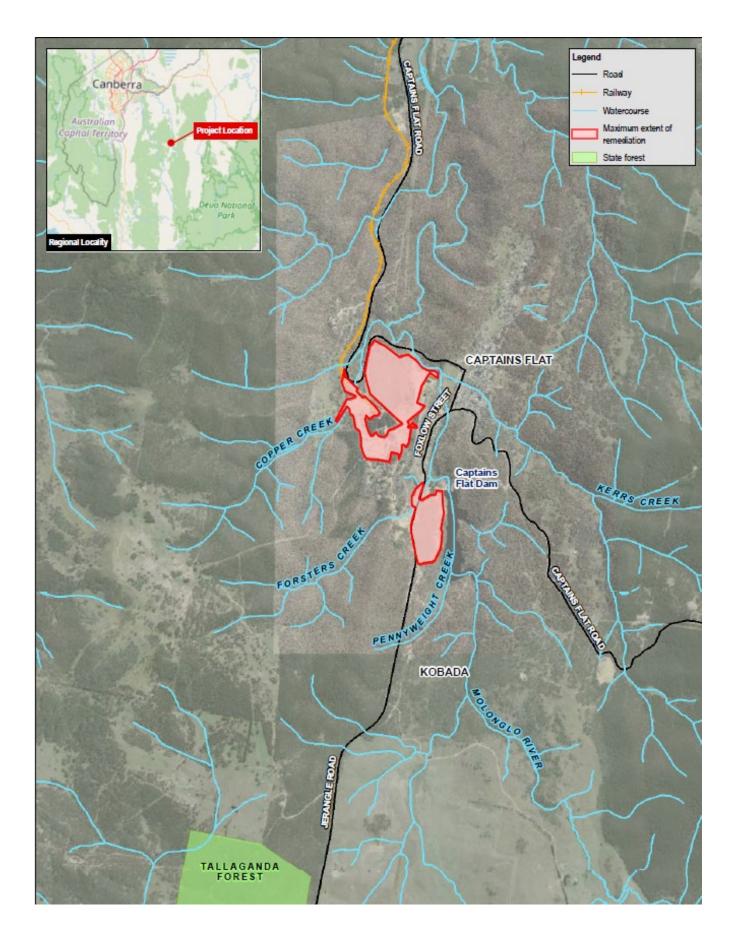
Project Director, **Project Director**, to activate the PIRMP; Project Manager, **Project Manager**, to action the PIRMP test drill.

8. Maps

8.1. Air Quality Monitoring and Water Quality Monitoring Locations



8.2. Site Remediation Location



8.3. Design Remediation Intent

See next page.

DEPARTMENT OF REGIONAL NSW LAKE GEORGE MINE, CAPTAINS FLAT **CAPPING AND REVEGETATION WORKS** 12551771



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Rev Des	scription		Checked	Approved	Date
Author	L POSADAS	Drafting Check	A. MACLEAN*		
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Plot Date:	8 March 2022 - 7:49 A	AM Plotte	ed by: Riken Joshua Lope	θZ	

SCALE NTS

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DRAWING LIST

DRG No.
12551771-C001
12551771-C002
12551771-C003
12551771-C004

DRAWING TITLE EXISTING SITE LAYOUT GENERAL ARRANGEMENT TYPICAL SECTIONS AND DETAILS

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DEPARTMENT OF

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Project No 12551771

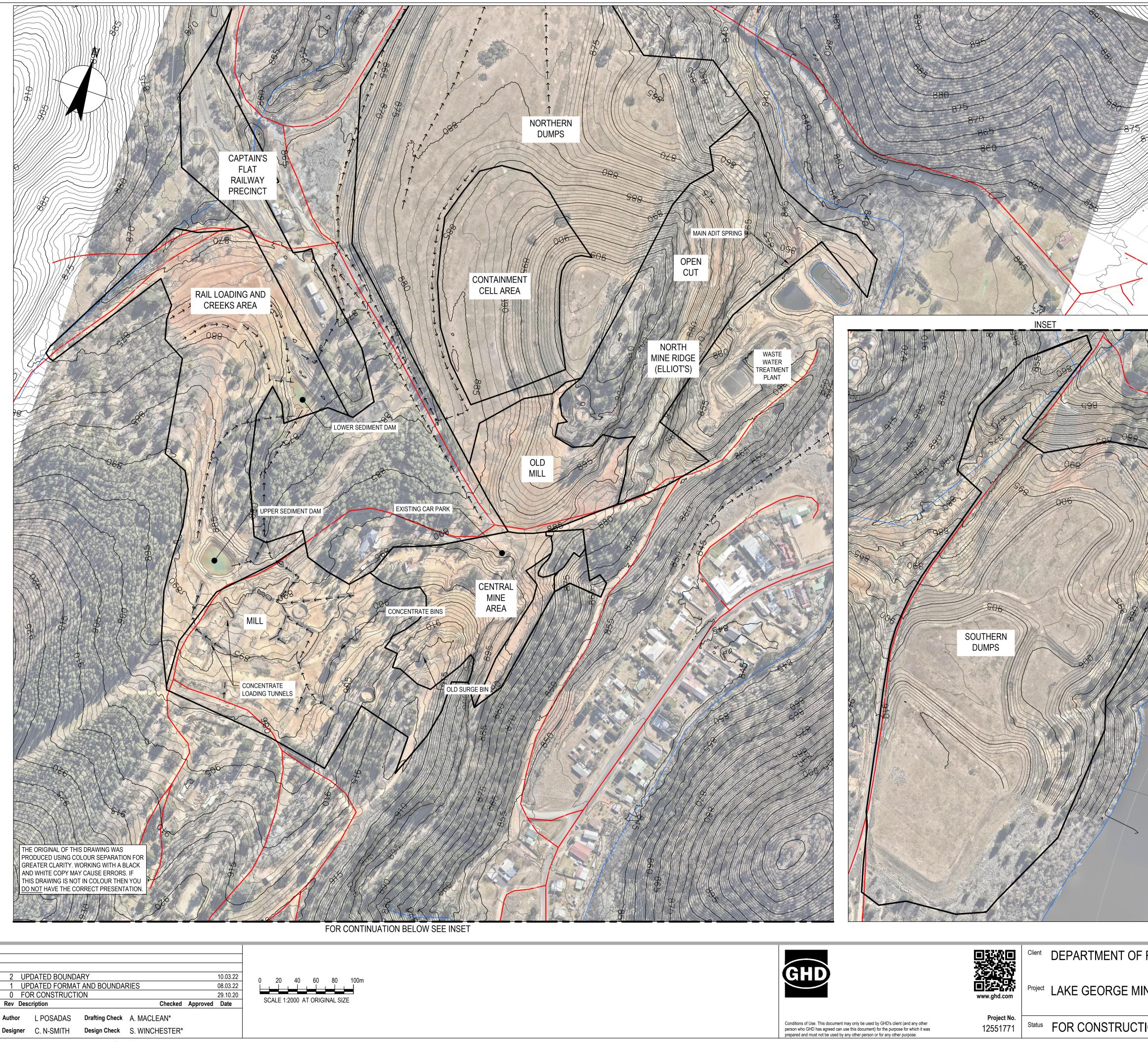
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COVER SHEET, LOCALITY PLAN AND DRAWING LIST

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REGIONAL NSW NE, CAPTAINS FLAT	Drawing CAPPING AND REVEGETATION WORKS COVER SHEET, LOCALITY PLAN AND DRAWING LIST	Size A1
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Plotted by: Riken Joshua Lopez Plot Date: 10 March 2022 - 9:56 AM

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- HYDROLINES

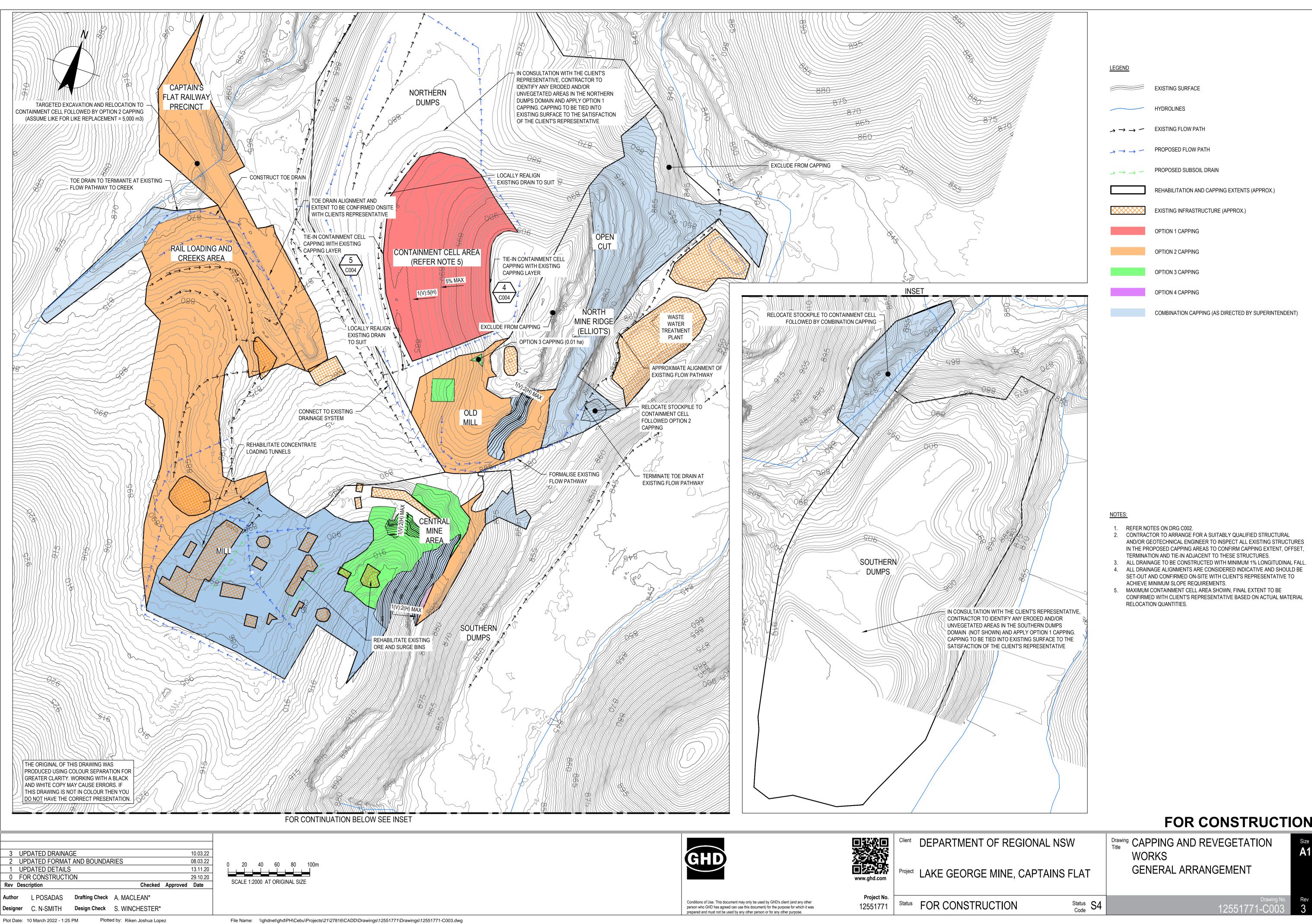
- $\rightarrow \rightarrow \rightarrow -$ EXISTING FLOW PATH
- REHABILITATION AND CAPPING EXTENTS (REFER NOTES 2 AND 3)



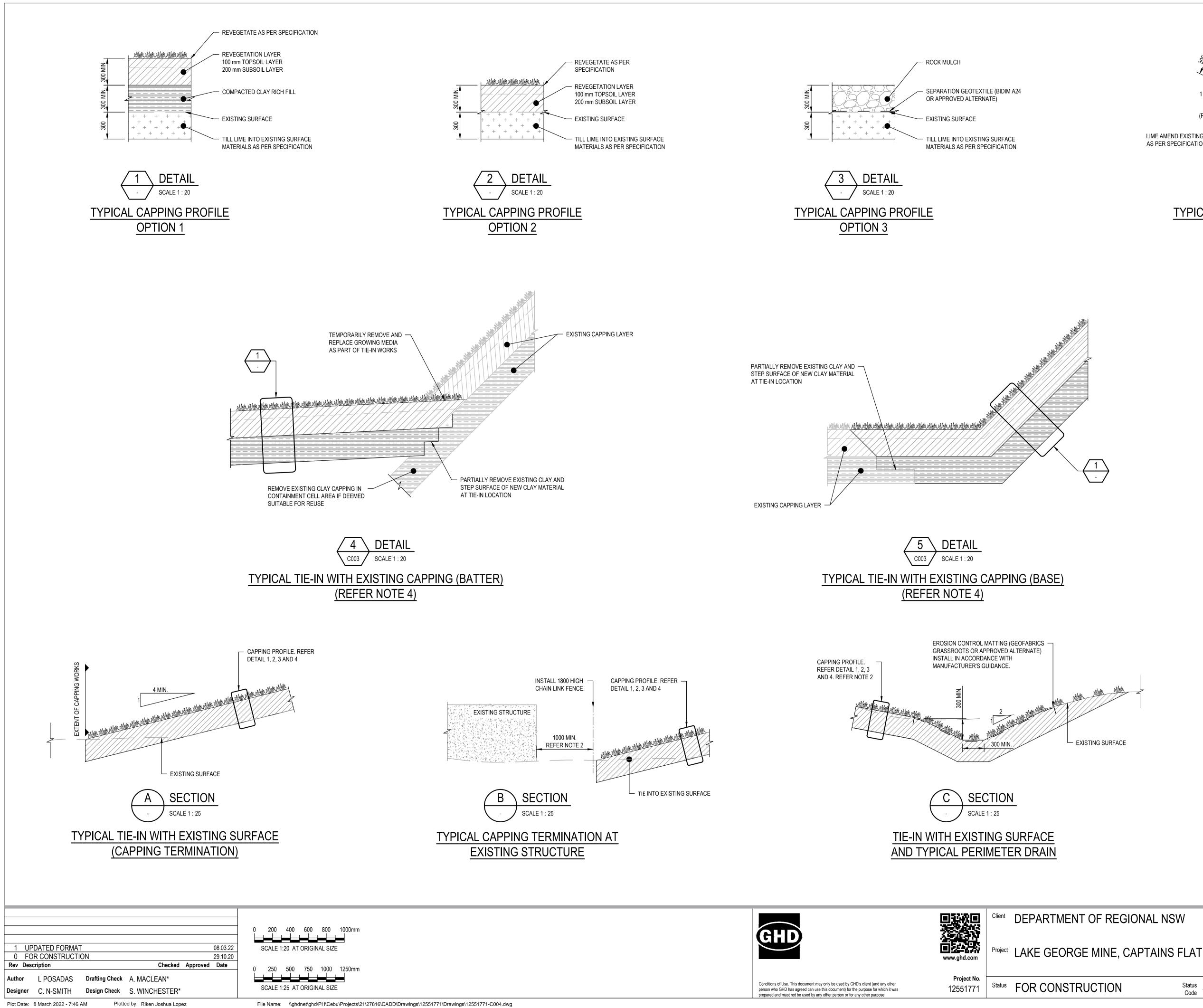
- 1. EXISTING SURFACE CONTOURS BASED ON NSW GOVERNMENT LIDAR DATA DATED MARCH 2018
- 2. ALL AREAS AND LOCATIONS ARE APPROXIMATE 3. EXTENT OF REHABILITATION AND CAPPING AREAS AREA TO BE
- CONFIRMED BY CLIENT'S REPRESENTATIVE AS PART OF CLEARING AND GRUBBING 4. SET DOWN AND CONTRACTOR AREA TO BE CONFIRMED BY CLIENT'S
- REPRESENTATIVE 5. CONTRACTOR TO CONFIRM LOCATION OF EXISTING SERVICES WITH THE
- CLIENT'S REPRESENTATIVE PRIOR TO INITIATION OF THE WORKS 6. CONTRACTOR TO CONFIRM LOCATION OF SURVEY BENCHMARKS WITH
- THE CLIENT'S REPRESENTATIVE PRIOR TO INITIATION OF THE WORKS
- 7. CONTRACTOR TO NOTIFY CLIENT'S REPRESENTATIVE FOR APPROVAL PRIOR TO REMOVAL OF ANY TREES OR LARGE PLANTS
- 8. NO EXISTING STRUCTURES SHALL BE DAMAGED OR REMOVED WITHOUT WRITTEN CONSENT FROM THE CLIENT'S REPRESENTATIVE

FOR CONSTRUCTION

REGIONAL NSW		Drawing CAPPING AND REVEGETATION WORKS	Size A1
NE, CAPTAINS FLAT		EXISTING SITE LAYOUT	
ION	Status S4	Drawing No. 12551771-C002	Rev 2



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REGIONAL NSW		Drawing Title CAPPING AND REVEGETATION WORKS	Size A1
NE, CAPTAINS FLAT		GENERAL ARRANGEMENT	
ION	Status S4	Drawing No. 12551771-C003	Rev 3



2 MAX. (REFER NOTE 3)

CELLULAR CONFINEMENT SYSTEM (PRESTO GEOWEB OR APPROVED ALTERNATE) - REFER NOTE 3

REVEGETATION LAYER 100 mm TOPSOIL LAYER 200 mm SUBSOIL LAYER

AS PER SPECIFICATION

└─ EXISTING SURFACE

DETAIL SCALE 1 : 20 **TYPICAL CAPPING PROFILE OPTION 4**

NOTES:

- 1. REFER NOTES ON DRG C002 AND C003.
- 2. CONTRACTOR TO ARRANGE FOR A SUITABLY QUALIFIED STRUCTURAL AND/OR GEOTECHNICAL ENGINEER TO INSPECT ALL EXISTING STRUCTURES IN THE PROPOSED CAPPING AREAS TO CONFIRM CAPPING EXTENT, OFFSET, TERMINATION AND TIE-IN ADJACENT TO
- THESE STRUCTURES. 3. FINAL GRADING AND INSTALLATION METHOD FOR CELLULAR CONFINEMENT SYSTEM TO BE CONFIRMED IN CONSULTATION WITH THE MANUFACTURER BASED ON REVEGETATION MATERIAL PROPERTIES.
- 4. FINAL TIE-IN DETAIL TO BE CONFIRMED FOLLOWING TEST PITTING BY CONTRACTOR IN CONTAINMENT CELL AREA, INCLUDING MINIMUM DEPTH OF EXISTING CAPPING MATERIAL TO BE RETAINED.

FOR CONSTRUCTION

Drawing CAPPING AND REVEGETATION

WORKS TYPICAL SECTIONS AND DETAILS Size **A1**

Status S4