

# Soil Conservation Service



# SDW - 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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Pollution Incident Response Management Plan - Lake George Mine Rehabilitation, Captains Flat.

#### 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<br>further recommendations of communications<br>and actions procedures |
| 0.4     | 27/11/2023 |                 | For review  |
| 0.5     | 28/11/2023 |                 | *Commentary provided marked up PDF document   |
| 0.6     | 28/11/2023 |                 | Sent for Review –   |
| 0.7     | 13/05/2024 |                 | Sections 3 and 7  |
| 0.8     | 13/05/2024 |                 | For application   |

#### Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing, June 2024. 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.

# **Contents**

| 1. | Р    | urp   | ose  | 4  |
|----|------|-------|--|----|
| 2  | . Е  | nvii  | onmental Protection License (EPL) details                        | 5  |
| 3  | . s  | cop   | oe   | 6  |
|    | 3.1. | Re    | sponsibilities   | 6  |
|    | 3.1  | .1.   | SCS PIRMP activation   | 6  |
|    | 3.2. | No    | tifications and Communications                                   | 7  |
|    | 3.2  | 2.1.  | Notification of relevant authorities                             | 7  |
|    | 3.2  | 2.2.  | Notification of neighbours and the local community               | 8  |
|    | 3.3. | De    | scription and likelihood of hazards and actions                  | 9  |
|    | 3.3  | 3.1.  | Active contamination hazards                                     | 9  |
|    |      |       | Pre-emptive Actions  |    |
|    |      |       | entory of Pollutants   |    |
|    | 3.5. | En    | vironmental Harm Minimisation                                    |    |
|    | 3.5  | 5.1.  | Insitu-Water   | 10 |
|    | 3.5  | 5.2.  | Safety Equipment and general controls                            | 11 |
|    | 3.5  | 5.3.  | Communicating with neighbours and the local community            | 11 |
|    | 3.5  | 5.4.  | Minimising harm to persons surrounding the workplace             | 12 |
| 4  | . A  | ctio  | ons to be taken during or immediately after a pollution incident | 13 |
| 5  | . C  | oor   | dinating with persons  | 14 |
| 6  | . s  | taf   | f Training   | 15 |
| 7  | . т  | est   | ing and updating of the PIRMP                                    | 15 |
| 8  | . N  | /laps | S  | 16 |
|    | 8.1. | Air   | Quality Monitoring and Water Quality Monitoring Locations        | 16 |
|    | 8.2. | Sit   | e Remediation Location   | 17 |
|    | 83   | De    | sign Remediation Intent  | 18 |

## 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

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

#### 3.1.2. Notifying relevant authorities

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

#### 3.1.3. Managing response to pollution incident

| Name of person responsible:              |  |  |
|--|--|--|
| Position or title: Environmental Manager |  |  |
| Business hours contact number/s:         |  |  |
| After hours contact number/s:            |  |  |
| Email:                                   |  |  |

# 3.2. Notifications and Communications

#### 3.2.1. Notification of relevant authorities

| Authority                                | Contact Information |
|--|---------------------|
| Environmental Protection Agency (EPA)    | Ph: 131 555         |
| Safework NSW                             | Ph: 131 050         |
| Queanbeyan Palerang<br>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 | Ph: (02) 4825 4944  |
| (closest public health unit)             |                     |
| NSW Fire & Rescue/ NSW RFS               | Ph: 000             |

Table 1. Relevant Authorities

# 3.2.2. Notification of neighbours and the local community

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

Table 2. Neighbours

# 3.3. Description and likelihood of hazards and actions

#### 3.3.1. Active contamination hazards

| 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   |

Table 3. Hazards and Impacts

## 3.3.2. Pre-emptive Actions

| 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   |

Table 4. Hazards and Impacts

# 3.4. Inventory of Pollutants

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

Table 5. Pollutants Inventory

#### 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.

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

#### Actions taken during and immediately after;

Activate this plan immediately.

Stop all works, assess for danger, make site safe and limit environmental risk

Notify relevant authorities, neighbours, local community and project stakeholder as soon as possible. Early warnings identified as key in establishing exclusion zones from extent of pollution incident.

Employ all reasonable mitigation measures and make safe controls to reduce the scale of pollution event where safe to do so and minimise the impacts on the surrounding environment and community.

Maintain community safety controls until pollution event has receded.

#### Actions taken after pollution event;

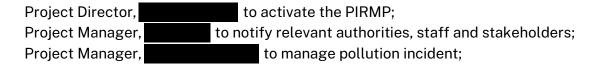
Conduct in-depth investigations to understand causation of pollution event.

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:



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.

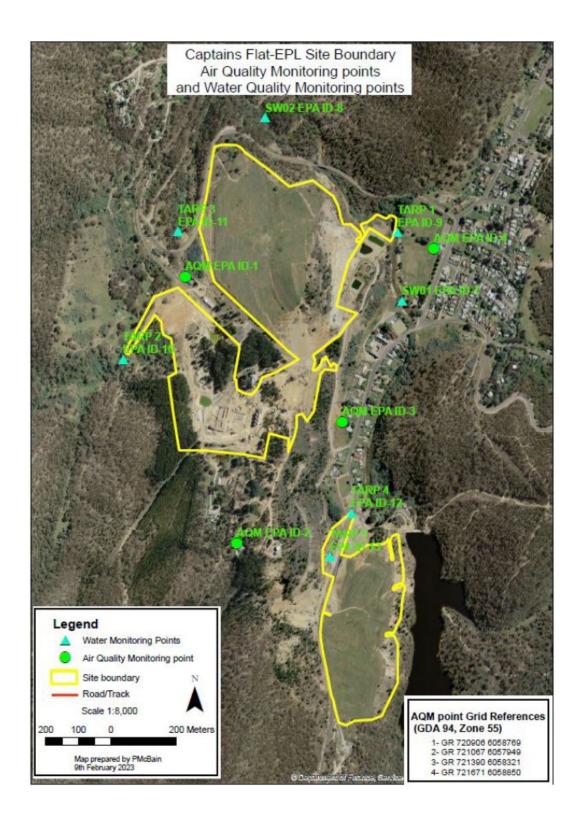
Records to be updated and stored in CM10 content manager.

#### Responsible personnel:

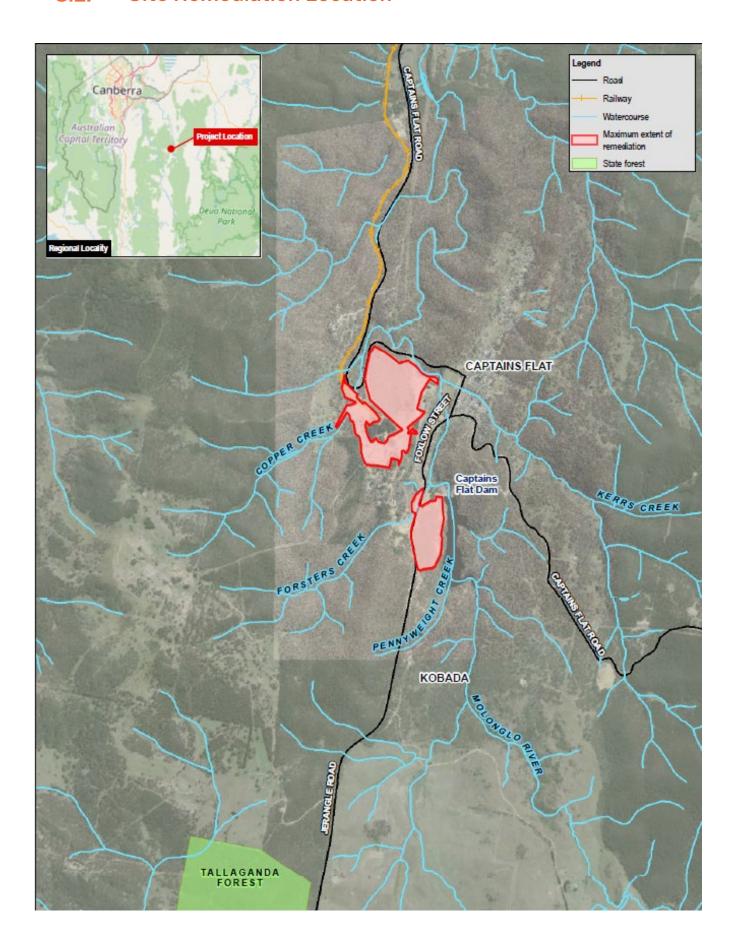
Project Director, to activate the PIRMP; Project Manager, to action the PIRMP test drill.

# 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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1 UPDATED FORMAT

0 FOR CONSTRUCTION

LOCALITY PLAN

# DRAWING LIST

G No. DRAWING TITLE

12551771-C001 COVER SHEET, LOCALITY PLAN AND DRAWING LIST

12551771-C002 EXISTING SITE LAYOUT
12551771-C003 GENERAL ARRANGEMENT
12551771-C004 TYPICAL SECTIONS AND DETAILS

DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION. WHERE THE DRAWINGS & THE SPECIFICATION DO NOT AGREE, THE CONTRACTOR SHALL SEEK CLARIFICATION FROM THE CLIENT'S REPRESENTATIVE.

FOR CONSTRUCTION







Project LAKE GEORGE MINE, CAPTAINS FLAT

WORKS
COVER SHEET, LOCALITY PLAN
AND DRAWING LIST

Drawing CAPPING AND REVEGETATION Title

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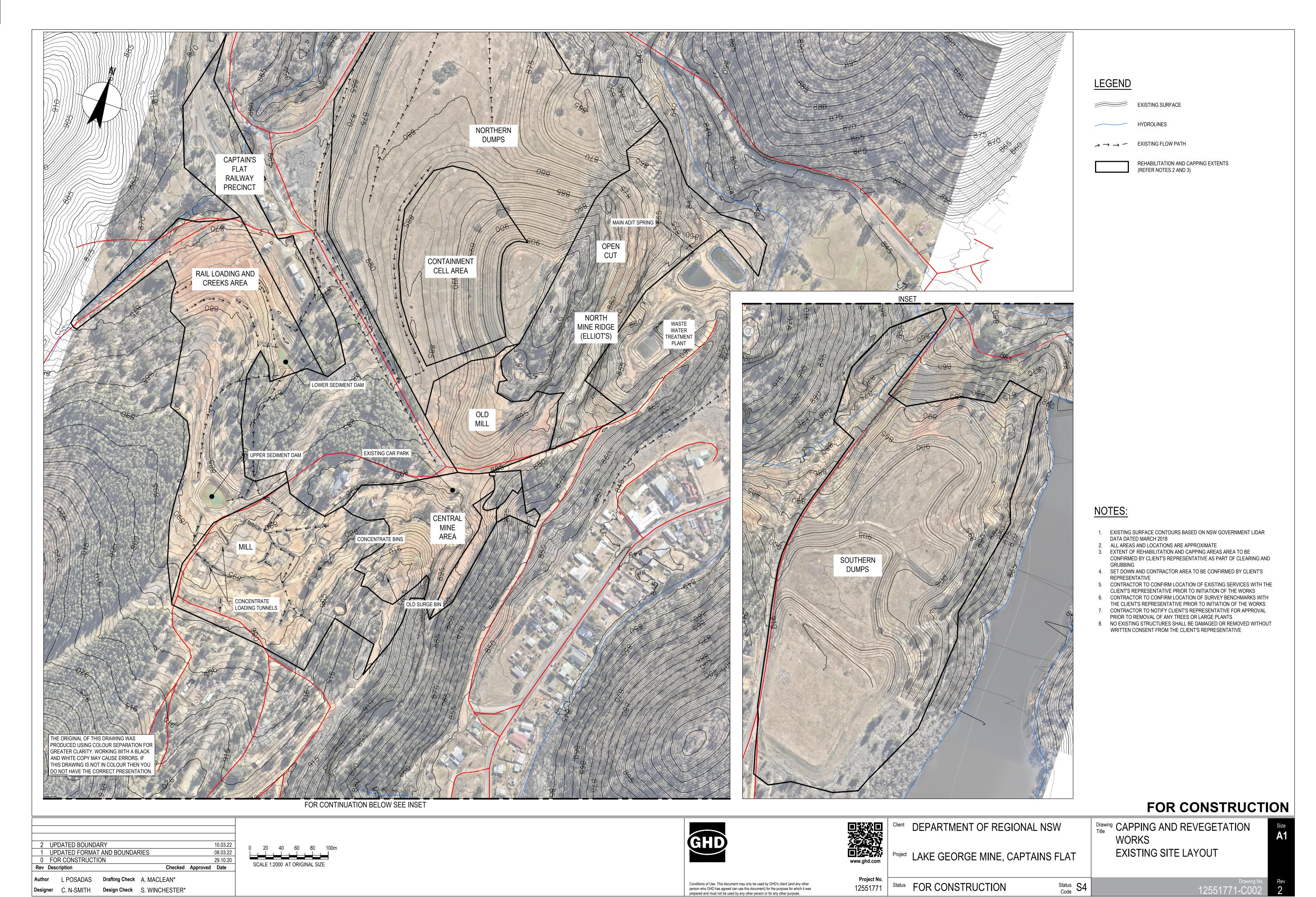
Project No. 12551771

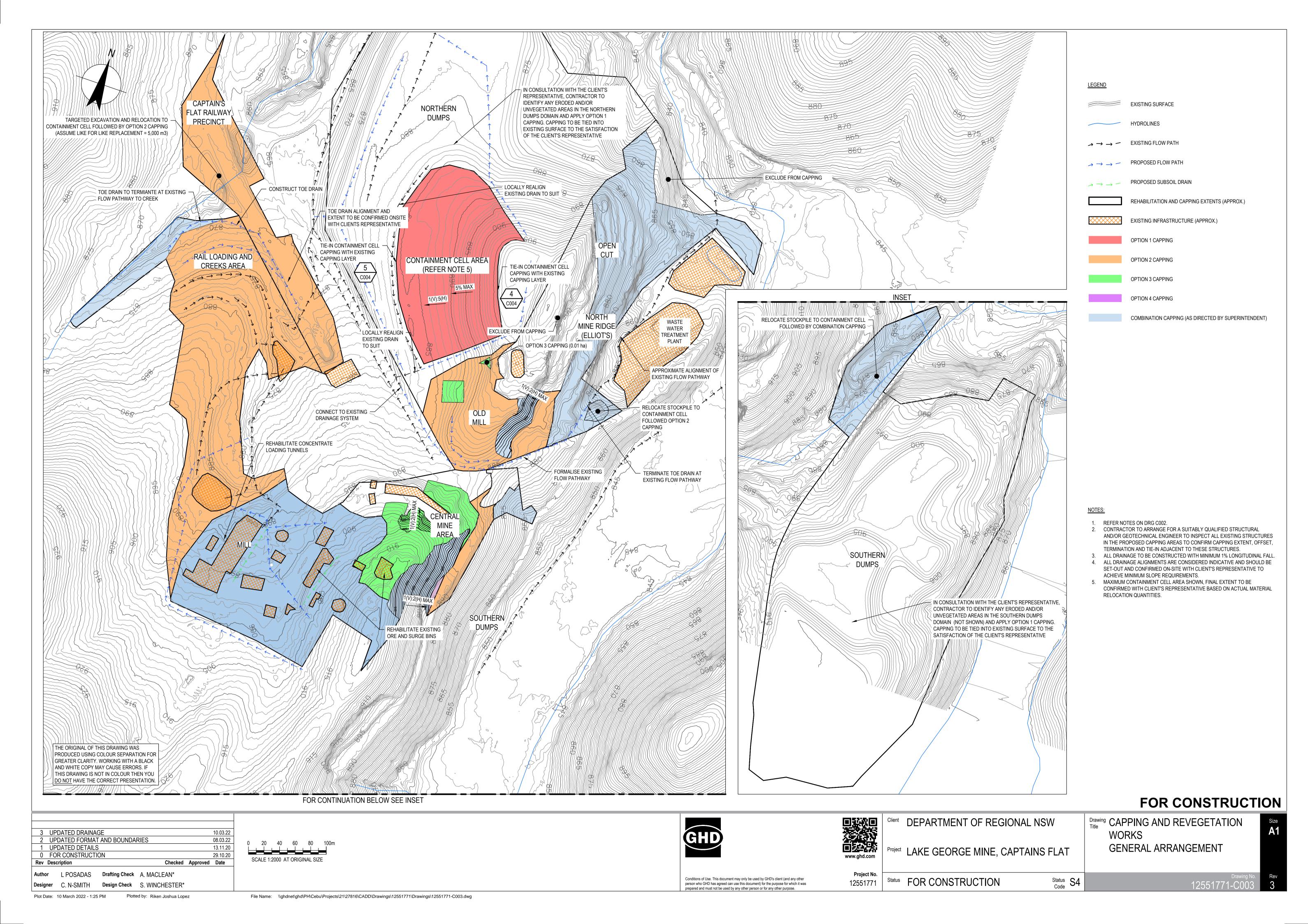
Status FOR CONSTRUCTION

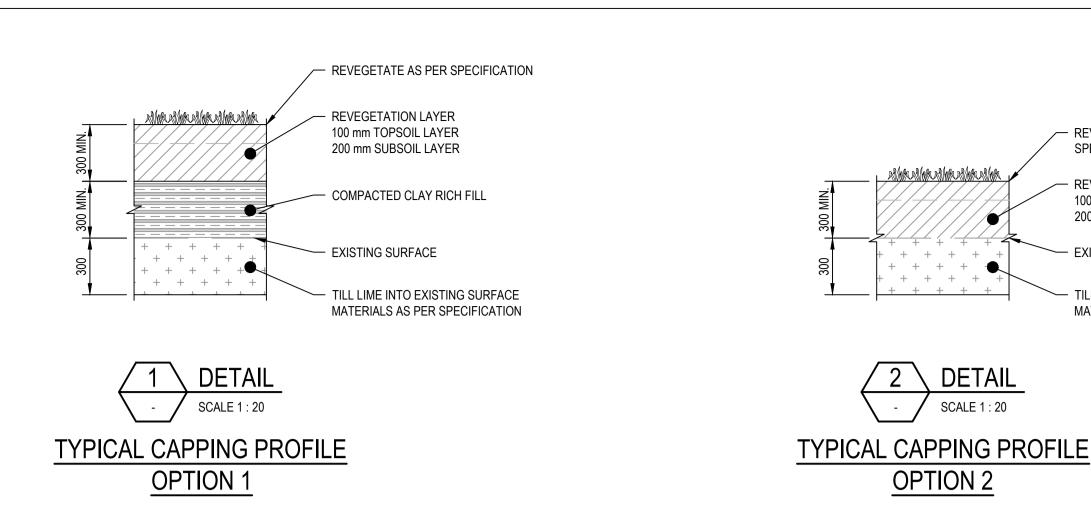
AND DRAWING LIST

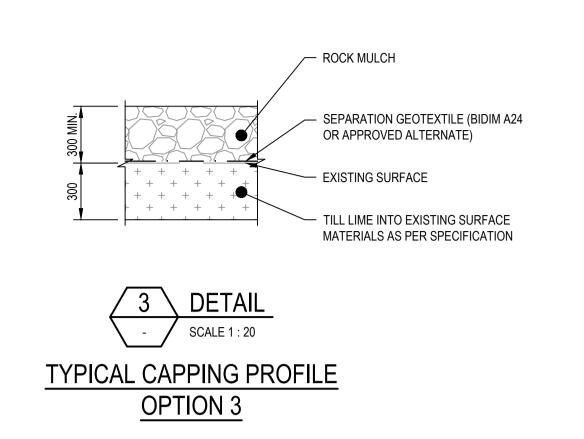
Drafting Check A. MACLEAN\*

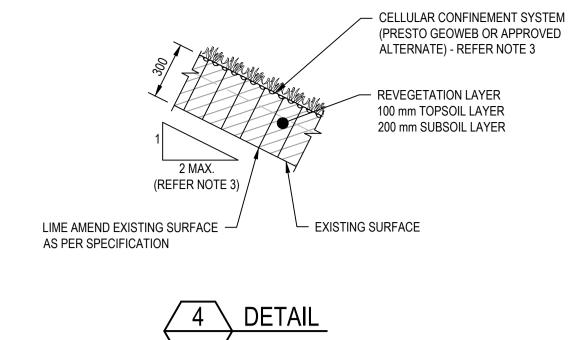
Design Check S. WINCHESTER\*

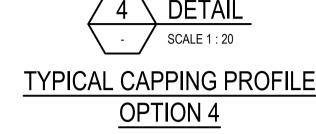


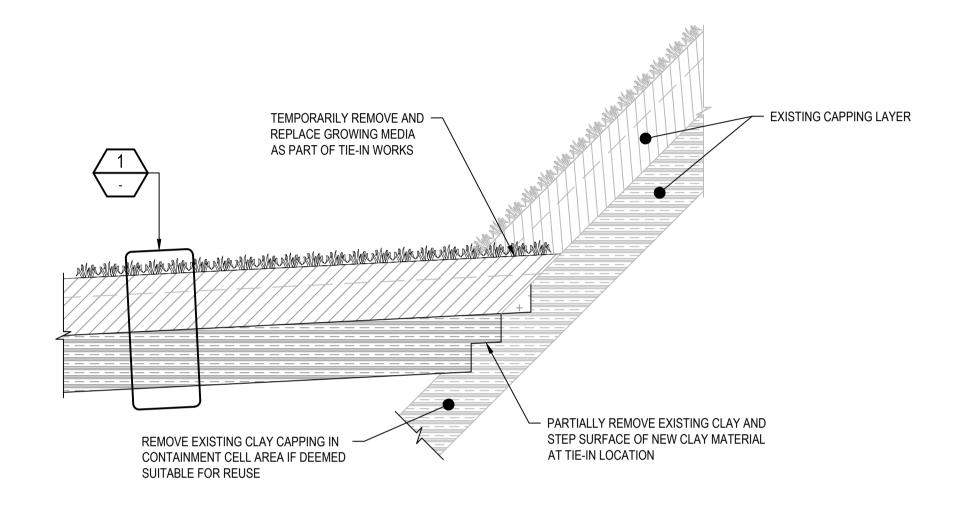












4 DETAIL

TYPICAL TIE-IN WITH EXISTING CAPPING (BATTER)

(REFER NOTE 4)

SCALE 1:20

- REVEGETATE AS PER

- REVEGETATION LAYER

100 mm TOPSOIL LAYER

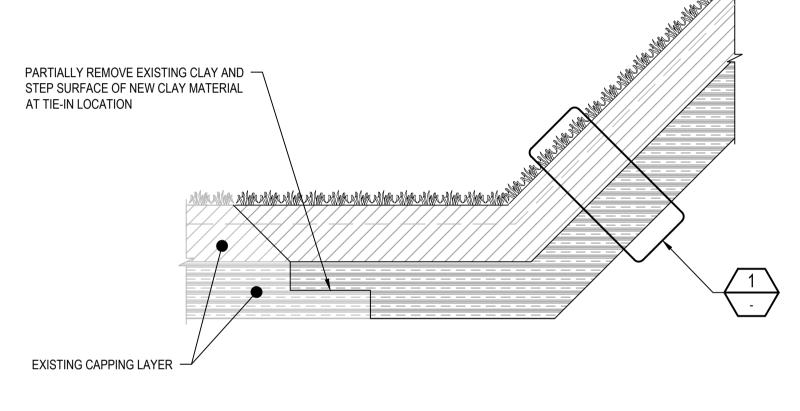
200 mm SUBSOIL LAYER

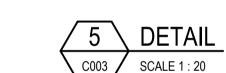
TILL LIME INTO EXISTING SURFACE

MATERIALS AS PER SPECIFICATION

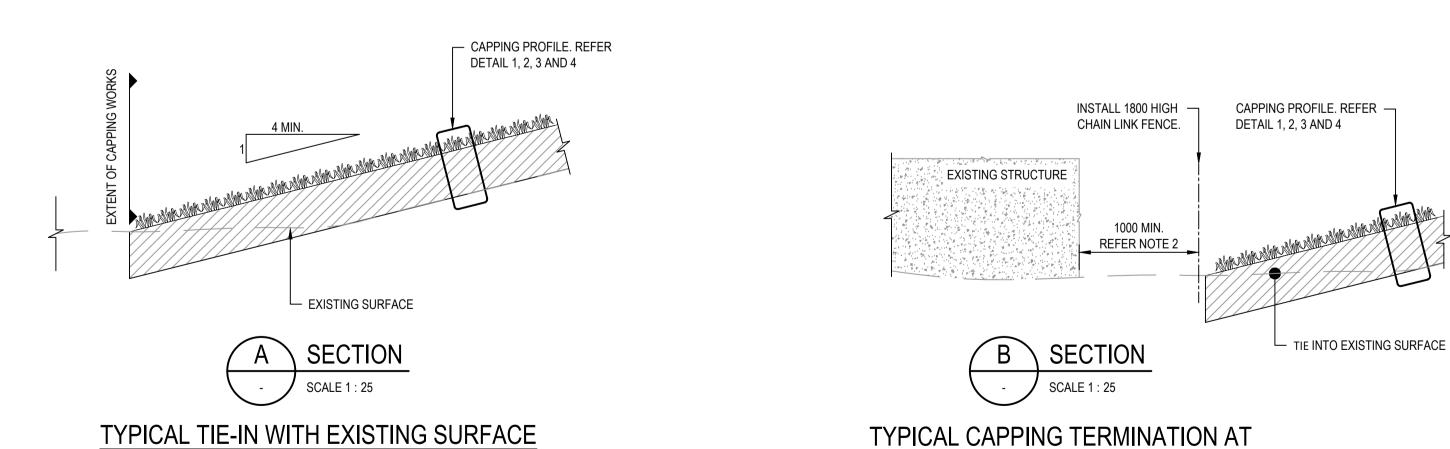
EXISTING SURFACE

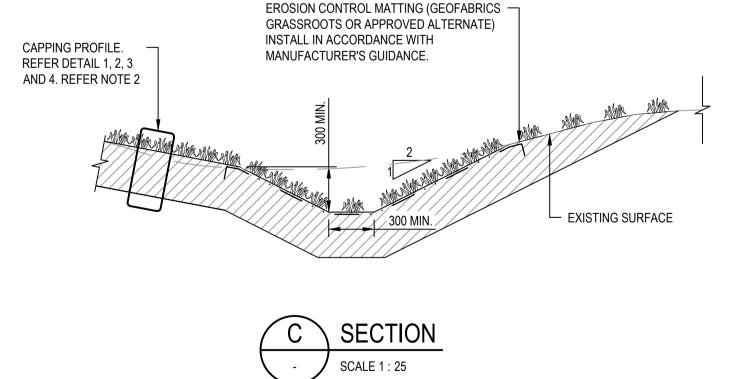
SPECIFICATION





# TYPICAL TIE-IN WITH EXISTING CAPPING (BASE) (REFER NOTE 4)





TIE-IN WITH EXISTING SURFACE AND TYPICAL PERIMETER DRAIN

# 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

1 UPDATED FORMAT 08.03.22 0 FOR CONSTRUCTION 29.10.20 Checked Approved Date Rev Description L POSADAS Drafting Check A. MACLEAN\* Design Check S. WINCHESTER\*

Plotted by: Riken Joshua Lopez

Plot Date: 8 March 2022 - 7:46 AM

(CAPPING TERMINATION)

SCALE 1:20 AT ORIGINAL SIZE SCALE 1:25 AT ORIGINAL SIZE



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Project LAKE GEORGE MINE, CAPTAINS FLAT

Status S4 Status FOR CONSTRUCTION

Drawing CAPPING AND REVEGETATION Title WORKS TYPICAL SECTIONS AND DETAILS

**EXISTING STRUCTURE**