Permit[1]

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit[1] number: EPPR02511714

Environmental authority takes effect 8 December 2015

The anniversary date of this environmental authority is the 23 December each year. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Principal address
Adani Mining Pty Ltd	Level 25, AMP Place 10 Eagle Street BRISBANE QLD 4001

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
16-(2c) Extractive >1000000t yr 16-(3c) Screening >1000000t yr	Disney Quarry - 12541 Gregory Dev Road BELYANDO - Lot 4 Plan SP116046 Borrow 7 Quarry - 472 Twin Hills Road and Clermont QLD 4721 - Lot 3235 Plan PH752

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Contaminated land

It is a requirement of the EP Act that an owner or occupier of land give written notice to the chief executive if they become aware of the following:

- a notifiable activity (as defined in Schedule 3) that is being, or has been, carried out on the land (notice must be given within 20 days)
- an event involving a hazardous contaminant on the land, or a change in the condition of the contaminated land, that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours).

For further information, including the form for giving notice, refer to the Queensland Government website http://www.qld.gov.au/ (using the search term 'managing contaminated land').

J A H. Mackenzie	8-DEC-2015
Signature	Date

James Mackenzie
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Part 1 – Conditions applicable to Borrow 7 and Disney Quarries

Part 2 – Conditions specific to Borrow 7 Quarry

Part 3 – Conditions specific to Disney Quarry

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

PART 1 – All sites

Agency interest: General	
Condition number	**Condition**
G1	All reasonable and practical measures must be taken to minimise the likelihood of **environmental harm** being caused.
G2	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable, or at most, within 24 hours of the holder becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G3	Other than as permitted by this environmental authority, the release of a **contaminant** into the environment must not occur.
G4	All information and records that are required by the conditions of this environmental authority must be kept for a minimum of 5 years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the administering authority upon request.

G5	A **suitably qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G6	All analyses required under this environmental authority must be carried out by a laboratory that has **NATA** certification, or an equivalent certification, for such analyses.
G7	When required by the administering authority, monitoring must be undertaken in the manner prescribed by the administering authority, to investigate a complaint that is not considered by the administering authority to be frivolous or vexatious, of environmental nuisance arising from the activity. The monitoring results must be provided to the administering authority upon request.
G8	The activity must not cause **environmental nuisance** at any **nuisance sensitive place** unless specifically authorised by a condition of this approval or where an **alternative arrangement** is in place.
G9	The activity must be undertaken in accordance with written procedures that: 1. identify potential risks to the environment from the activity during routine operations, closure and an emergency. 2. establish and maintain control measures that **minimise** the potential for environmental harm. 3. ensure plant, equipment and measures are maintained in a proper and effective condition. 4. ensure plant, equipment and measures are operated in a proper and effective manner. 5. ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994.* 6. ensure that reviews of environmental performance are undertaken at least annually.

Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any nuisance sensitive place unless specifically authorised by a condition of this approval or where an alternative arrangement is in place.
A2	Notwithstanding **condition G8**, dust deposition attributable to project activities, when measured at a nuisance sensitive place, must not exceed 120 milligrams per square meter per day, averaged over 1 month.
A3	Other indicators that are measured at any nuisance sensitive place must not exceed the air quality objectives specified in Schedule 1 of the *Environmental Protection (Air) Policy 2008.* *Note: 'Indicator' is defined in Schedule 2 of the Environmental Protection (Air) Policy 2008 as 'a contaminant that may be present in the air environment'.*

Agency interest: Noise	
Condition number	**Condition**
N1	Noise attributable to quarry activities must not cause nuisance at a nuisance sensitive place unless specifically authorised by a condition of this approval or where an alternative agreement is in place.
N2	Noise levels, when measured at a nuisance sensitive place, must not exceed the noise quality objectives specified in Schedule 1 of the *Environmental Protection (Noise) Policy 2008*.
Agency interest: Water	
Condition number	**Condition**
W1	Stormwater contaminated by the activity must be managed to minimise or prevent any adverse impacts on the values of the **receiving environment**.
W2	Ponds used for the storage or treatment of aqueous waste must be constructed, installed and maintained to: a) Prevent any release of aqueous waste from the ponds other than as authorised under this approval b) Ensure the stability of the pond structure.
W3	Erosion and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.
W4	The stormwater runoff from the facility generated by a **24 hour storm event with an average recurrence interval of one in five years** must be retained on site and treated to remove contaminants before release.
Agency interest: Land	
Condition number	**Condition**
L1	Treatment and management of acid sulfate soils must comply with the current edition of the *Queensland Acid Sulfate Soil Technical Manual*.
L2	Acid sulfate soils, acid-producing rocks and marine sediments must not be processed.
L3	Contaminants from the activity must not be released to land unless otherwise authorised under this approval.

L4	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: 1. suitable native species of vegetation for the location are established and sustained for earthen surfaces 2. potential for erosion is minimised 3. the quality of water, including seepage, released from the site does not cause environmental harm 4. potential for environmental nuisance caused by dust is minimised 5. the water quality of any residual water body does not have potential to cause environmental harm 6. the final landform is stable and protects public safety.
L5	Rehabilitation of disturbed areas required under **condition L4**, must take place progressively as works are staged and new areas of extraction are commenced.
Agency interest: Waste	
Condition number	**Condition**
WS1	All waste generated in carrying out the activity must be reused, recycled or lawfully disposed of offsite.

PART 2 – Borrow 7 Quarry

Agency interest: General	
Condition number	**Condition**
1	Except for the operational areas identified in Schedule 1 – Borrow 7 Quarry Overall Site Layout Plan, a minimum buffer distance of **50 metres** must be maintained between extraction areas and the high bank of any watercourse, lake or wetland.

<table>
<tr><th colspan="2">Agency interest: Noise</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>2</td><td>Blasting activities must not exceed the limits for peak particle velocity and air blast overpressure in Table 1 —Blasting noise limits when measured at any nuisance sensitive place in accordance with the associated monitoring requirements.

Table 1 —Blasting noise limits
<table>
<tr><th>Blasting criteria</th><th>Blasting limits</th></tr>
<tr><td>Airblast overpressure</td><td>115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time.</td></tr>
<tr><td>Ground vibration peak particle velocity</td><td>5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/second peak particle velocity at any time.</td></tr>
</table>
Associated monitoring requirements
1. Monitoring must be in accordance with the most recent editions of the administering authority's 'Noise and Vibration from Blasting' guideline and Noise Measurement Manual and any relevant Australian standard.
2. All monitoring devices must be correctly calibrated and maintained.</td></tr>
<tr><td>3</td><td>Unless prior approval is obtained from the administering authority:
1. blasting is only permitted during the hours of 9am to 3pm Monday to Friday, and from 9am to 1pm on Saturdays.
2. blasting is not permitted at any time on Sundays or public holidays</td></tr>
<tr><th colspan="2">Agency interest: Biodiversity</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>4</td><td>The holder of this environmental authority must implement offset requirements as determined by the Coordinator-General approved Biodiversity Offset Strategy for the Carmichael Coal Mine and Rail Project as they relate to Borrow 7 Quarry.</td></tr>
</table>

PART 3 – Disney Quarry

<table>
<tr><th colspan="2">Agency interest: General</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>5</td><td>Except for the areas identified in Schedule 2 – Disney Quarry Overall Site Layout Plan, a minimum buffer distance of 50 metres must be maintained between extraction areas and the high bank of any watercourse, lake or wetland.</td></tr>
</table>

Agency interest: Noise	
Condition number	**Condition**
6	**Blasting** or the generation of **substantial low frequency noise** is not permitted.
Agency interest: Biodiversity	
Condition number	**Condition**
7	The holder of this environmental authority must implement offset requirements as determined by the Coordinator-General approved Biodiversity Offset Strategy for the Carmichael Coal Mine and Rail Project as they relate to Disney Quarry.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

'activities' means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

'administering authority' means the Department of Environment and Heritage Protection or its successor or predecessors.

'airblast overpressure' means energy transmitted from the blast site within the atmosphere in the form of pressure waves. The maximum excess pressure in this wave, above ambient pressure is the peak airblast overpressure measured in decibels linear (dBL).

'alternative arrangement' means a written agreement between the approval holder and the occupier of a nuisance sensitive place about the way in which a particular nuisance impact will be dealt with at a sensitive place, and may include an agreed period of time for which the arrangement is in place. An alternative arrangement may include, but is not limited to, a range of nuisance abatement measures to be installed at the sensitive place, or provision of alternative accommodation for the duration of the relevant nuisance impact.

'background' means noise, measured in the absence of the noise under investigation, as L A90,T being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

'blasting' is the use of explosives to fracture:
• rock, coal and other minerals for later recovery; or
• structural components or other items to facilitate removal from a site or for reuse.

'contaminant(s)' as defined in Section 11 of the *Environmental Protection Act 1994*.

'environmental harm' as defined in Section 14 of the *Environmental Protection Act 1994*.

'environmental nuisance' as defined in Section 15 of the *Environmental Protection Act 1994*.

'NATA' means National Association of Testing Authorities.

'nuisance sensitive place' includes:
• a dwelling, residential allotment, mobile home or caravan park, residential premises.
• a motel, hotel or hostel.
• a kindergarten, school, university or other educational institution.
• a medical centre or hospital.
• a protected area under the *Nature Conservation Act 1992*
• a public thoroughfare, park or gardens.
• for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.
• a workplace used as an office or for business or commercial purposes, which is not part of the project activities and does not include employee accommodation, grazing and farmland, unoccupied buildings or public roads.

'peak particle velocity (ppv)' means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mm/s).

'receiving environment' in relation to an activity that causes or may cause environmental harm, means the part of the environment to which the harm is, or may be, caused. The receiving environment includes (but is not limited to):
(a) a watercourse; and
(b) groundwater.

'suitably qualified person(s)' means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

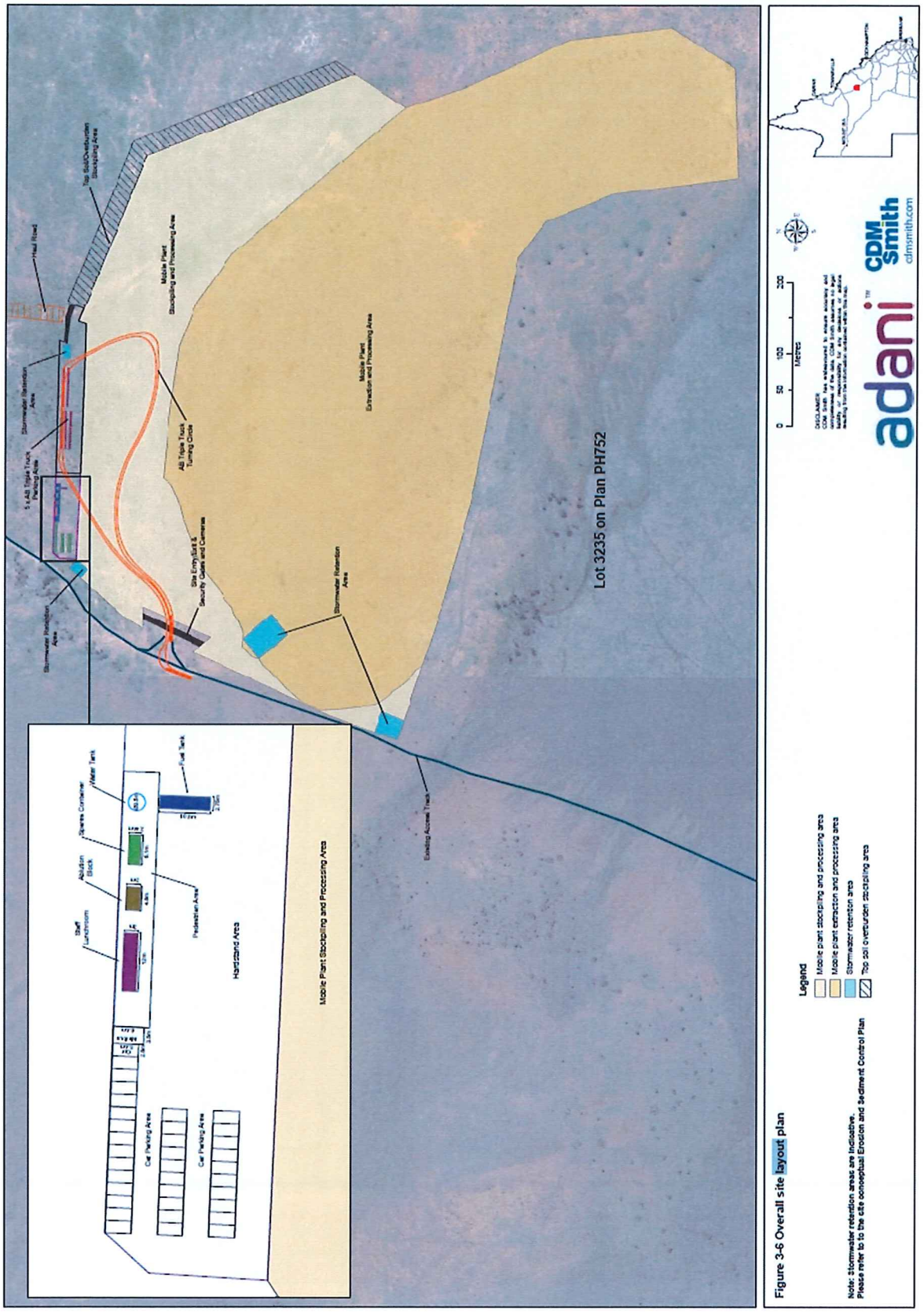
'24 hour storm event with an average recurrence interval of 1 in 5 years' means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 5 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 5 years, identifies a rainfall intensity of 7.09mm/hour. The rainfall depth for this event is therefore 24 hour x 7.09mm/hour = 170.16mm.*

'watercourse' as defined in Section 8, Schedule 12 of the *Environmental Protection Regulation 2008.*

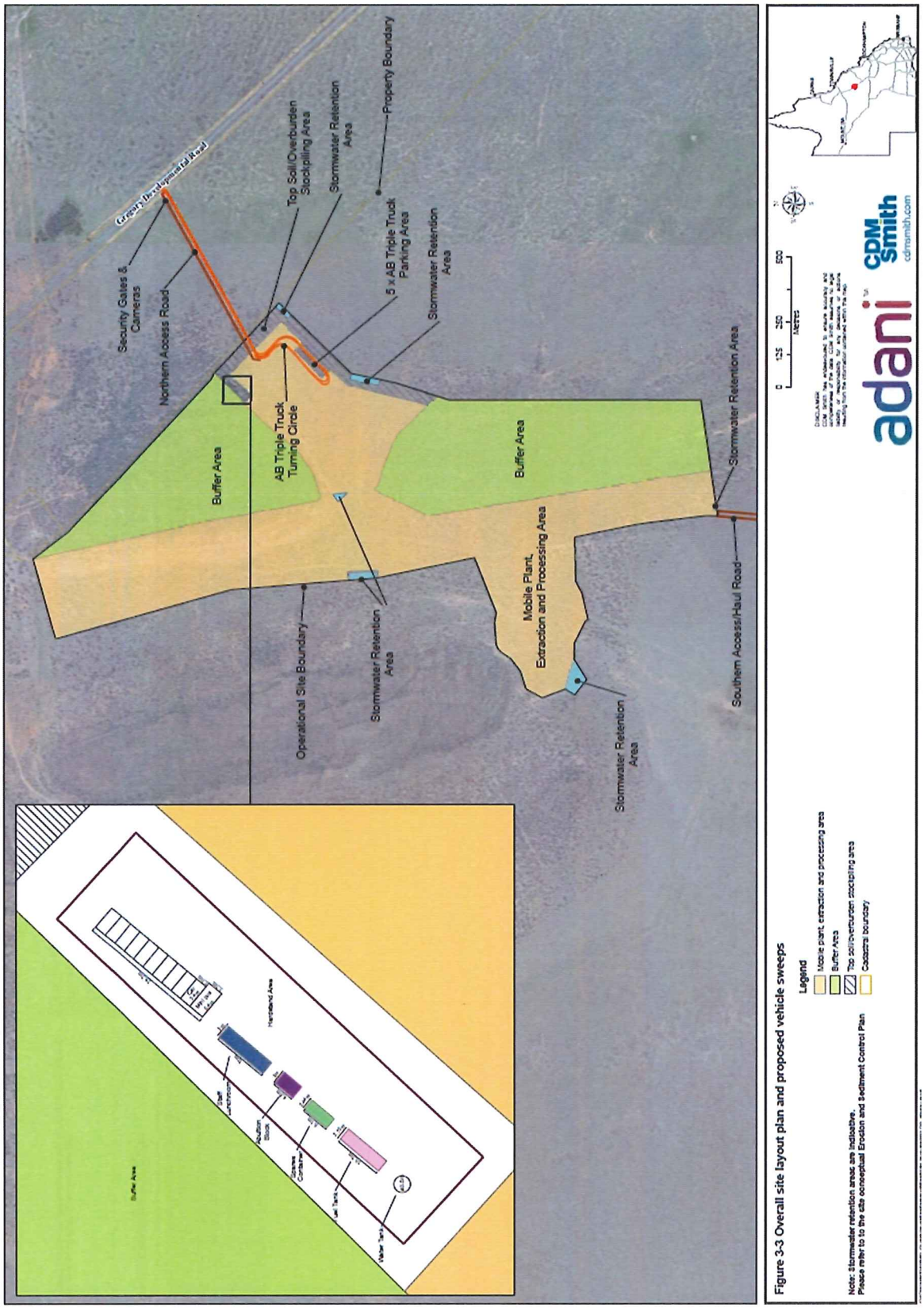
'waters' includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

'wetland' as defined in Schedule 12 of the *Environmental Protection Regulation 2008*, means an area shown as a wetland on the map of referable wetlands.

Schedule 1— Borrow 7 Quarry Overall Site Layout Plan



Schedule 2— Disney Quarry Overall Site Layout Plan



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