

Permit

Environmental Protection Act 1994

Environmental authority EPPR00873513

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

Environmental authority number: EPPR00873513

Environmental authority takes effect on 13 October, 2017

Environmental authority holder(s)

Name(s)	Registered address
Garbstone Downs Pty Ltd	C/- Toohey Reid, Lvl 6, 82 Eagle Street, BRISBANE, QLD 4001

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
16-(2a) Extractive greater than 5,000 tonnes per year but less than 100,000 tonnes per year	Lot 3 Plan SP211481
16-(3a) Screening greater than 5,000 tonnes per year but less than 100,000 tonnes per year	Lot 2 Plan SP211481
	Lot 6 Plan SP211481

Additional information for applicants

Environmentally relevant activities

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

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

Contaminated land

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

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

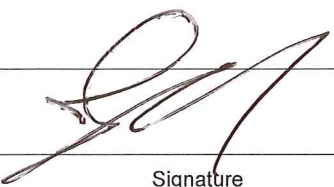
Please note that, in accordance with section 200 of the EP Act, an EA has effect:

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or
- b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
- c) otherwise- one the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.


Signature

13/10/2017

Date

Tariq Khan
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Permit and Licence Management
Department of Environment and Heritage
Protection
GPO Box 2454
Brisbane QLD 4001
Phone: 1300 130 372
Email: palm@ehp.qld.gov.au

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)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Natural Resources and Mines (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.dnrm.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Heritage Protection to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

GENERAL	
G1	Activities under this environmental authority must be conducted in accordance with the following limitations: Not more than 100,000 tonnes per annum to be undertaken in the areas specified in "Figure 2 - Conceptual Site Layout" (Drawing Number: 1072.056A revision 2, dated 20th August 2011, produced by Groundwork Plus).
G2	The only areas permitted to have material extracted or dredged under this approval are those shown in "Figure 2 - Conceptual Site Layout" (Drawing Number: 1072.056A revision 2, dated 20th August 2011, produced by Groundwork Plus).

G3	The placement of all extracted and dredged spoil must occur within the extraction pond areas or the designated hatched areas shown in "Figure 2 - Conceptual Site Layout" (Drawing Number: 1072.056A revision 2, dated 20th August 2011, produced by Groundwork Plus).
G4	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities .
G5	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G6	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G7	Environmental monitoring results and all other information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. All information and records required by the conditions of this environmental authority must be provided to the administering authority, or nominated delegate upon request, within the required timeframe and in the specified format.
G8	An appropriately 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.
G9	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of his approval must be calibrated, and appropriately operated and maintained.
G10	When required by the administering authority , monitoring must be undertaken in the manner prescribed by the administering authority , to investigate a complaint of environmental nuisance arising from the activity . The monitoring results must be provided within 10 business days to the administering authority upon its request.
G11	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 <i>Environmental Protection Act 1994</i> 6. ensure that reviews of environmental performance are undertaken at least annually.
AIR	
A1	Other than as permitted within this environmental authority, odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place .
A2	Dust and particulate matter emissions must not exceed the following levels when measured at any nuisance sensitive place or commercial place: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions), or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM₁₀) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive place or commercial place downwind of the site, when monitored in accordance with: • Australian Standard AS 3580.9.6 of 2003 (or more recent editions) 'Ambient air – Particulate matter – Determination of suspended particulate PM₁₀ high-volume sampler with size-selective inlet – Gravimetric method'; or

	any alternative method of monitoring PM₁₀ which may be permitted by the "Air Quality Sampling Manual" as published from time to time by the administering authority.
LAND	
L1	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: - suitable native species of vegetation for the location are established and sustained for earthen surfaces; - potential for erosion is minimised; - the quality of water released from the site, including seepage, does not cause environmental harm; - potential for environmental nuisance caused by dust is minimised; - the water quality of any residual water body does not have potential to cause environmental harm; - the final landform is stable and protects public safety.
L2	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.
L3	Any extracted sand, silt or soil below 20m AHD must be tested for pyrite, heavy metals and acid sulphate soils prior to being used for rehabilitation purposes. These results must be submitted to Administering authority for review at least 28 days prior to any rehabilitation works involving material extracted below 20m AHD being undertaken.
L4	Any activity that is likely to disturb any fauna or flora outside of the works area "Figure 2 - Conceptual Site Layout" (Drawing Number: 1072.056A revision 2, dated 20th August 2011, produced by Groundwork Plus), must be carried out in such a manner so that any disturbance resulting from the conducting extracting or dredging activities is prevented or minimised to the greatest practicable extent.
L5	A buffer from the environmental relevant activities at the site must be provide to Lagoon Creek and to all remanent vegetation onsite. The buffer must be implemented with the following: - Be a minimum of 20 metres. - Be of sufficient width to ensure continued creek bank stability, the stability of adjacent lands and the structural integrity of the ponds on site - Vegetation within the buffer must be progressively rehabilitated by supplementary plantings to establish a vegetated corridor, provide habitat for wildlife, stabilise river banks and minimise erosion, and - A weed control program must be implemented to progressively remove existing weeds from the buffer and to minimise future weed invasions.
L6	All infrastructure, constructed by of for the conduct of environmentally relevant activities including, but not limited to, water and fuel storage structures, sand and gravel screening and processing plant, dredges, etc., must be removed from the site prior to surrender of the develop approval for these environmental relevant activities, except where agreed in writing by the post-extraction/dredging land owner.
NOISE	
N1	Noise from the environmental relevant activity must not cause an environmental nuisance at any nuisance sensitive place or commercial place .

N2	All noise from activities must not exceed the levels specified in Table 1 – Noise limits at any nuisance sensitive or commercial place. Table 1 – Noise limits <table><tr><th rowspan="2">Noise level dB(A) measured as</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sundays and public holidays</th></tr><tr><th>7am - 6pm</th><th>6pm - 10pm</th><th>10pm - 7am</th><th>7am - 6pm</th><th>6pm - 10pm</th><th>10pm - 7am</th></tr><tr><td></td><td colspan="6">Noise measured at a Noise sensitive place</td></tr><tr><td>LA₁₀, adj, 10mins</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td></tr><tr><td>LA₁, adj, 10mins</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr><tr><td></td><td colspan="6">Noise measured at a Commercial place</td></tr><tr><td>LA₁₀, adj, 10mins</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr><tr><td>LA₁, adj, 10mins</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td></tr></table>	Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays			7am - 6pm	6pm - 10pm	10pm - 7am	7am - 6pm	6pm - 10pm	10pm - 7am		Noise measured at a Noise sensitive place						LA ₁₀ , adj, 10mins	Bkg + 5	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 5	Bkg + 0	LA ₁ , adj, 10mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5		Noise measured at a Commercial place						LA ₁₀ , adj, 10mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5	LA ₁ , adj, 10mins	Bkg + 15	Bkg + 15	Bkg + 10	Bkg + 15	Bkg + 15	Bkg + 10
Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays																																																				
	7am - 6pm	6pm - 10pm	10pm - 7am	7am - 6pm	6pm - 10pm	10pm - 7am																																																		
	Noise measured at a Noise sensitive place																																																							
LA ₁₀ , adj, 10mins	Bkg + 5	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 5	Bkg + 0																																																		
LA ₁ , adj, 10mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5																																																		
	Noise measured at a Commercial place																																																							
LA ₁₀ , adj, 10mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5																																																		
LA ₁ , adj, 10mins	Bkg + 15	Bkg + 15	Bkg + 10	Bkg + 15	Bkg + 15	Bkg + 10																																																		
N3	When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: • LA₁₀, adj, 10mins • LA₁, adj, 10mins • The level and frequency of occurrence of impulsive or tonal noise, • Atmospheric conditions including wind speed and direction, • Effects due to extraneous factors such as traffic noise, and • Location, date and time of recording.																																																							
N4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authorities Noise Measurement Manual.																																																							
SOCIAL																																																								
S1	You must record the following details of all environmental complaints received: 1) date and time the complaint was received 2) name and contact details of the complainant when provided and authorised by the complainant 3) nature of the complaint 4) investigation undertaken 5) conclusions formed 6) actions taken.																																																							
WASTE																																																								
WS1	All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste.																																																							

WATER																																
W1	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.																															
W2	The only contaminants to be released to surface waters are settled stormwater runoff from areas of the site not likely to be contaminated with waste materials to waters described as Lagoon Creek, in accordance with Table 2—Surface water release limits and the associated monitoring requirements. Table 2 - Surface water release limits <table><tr><th>Release Point Description (s)</th><th>Quality Characteristics</th><th>Limit</th><th>Limit Type</th><th>Minimum Monitoring Frequency</th></tr><tr><td rowspan="2">WM1</td><td>Turbidity (NTU)</td><td>< 50</td><td>Maximum</td><td rowspan="6">Once within 24 hours prior to release.</td></tr><tr><td>Total Suspended Solids (mg/L)</td><td>< 6</td><td>Maximum</td></tr><tr><td>WM2</td><td>Total Nitrogen (µg/L)</td><td><500</td><td>Maximum</td></tr><tr><td rowspan="3">WM3</td><td>Total Phosphorus (µg/L)</td><td><50</td><td>Maximum</td></tr><tr><td>Dissolved Oxygen (mg/L)</td><td>2</td><td>Minimum</td></tr><tr><td>pH</td><td>6.5 – 8.5</td><td>Range</td></tr></table> - Monitoring location and release points must be situated and maintained in accordance with "Figure 2 - Conceptual Site Layout" (Drawing Number: 1072.056A revision 2, dated 20th August 2011, produced by Groundwork Plus). - Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Heritage Protection Monitoring and Sampling Manual. - Water and sediment samples must be representative of the general condition of the water body or sediments. - All determinations must employ analytical practical quantification limits of sufficient sensitivity to enable comparisons to be made against water quality objectives/triggers/limits relevant to the particular water or sediment quality characteristic. - Monitoring must be undertaken during a release and at the frequency stated. - All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.					Release Point Description (s)	Quality Characteristics	Limit	Limit Type	Minimum Monitoring Frequency	WM1	Turbidity (NTU)	< 50	Maximum	Once within 24 hours prior to release.	Total Suspended Solids (mg/L)	< 6	Maximum	WM2	Total Nitrogen (µg/L)	<500	Maximum	WM3	Total Phosphorus (µg/L)	<50	Maximum	Dissolved Oxygen (mg/L)	2	Minimum	pH	6.5 – 8.5	Range
Release Point Description (s)	Quality Characteristics	Limit	Limit Type	Minimum Monitoring Frequency																												
WM1	Turbidity (NTU)	< 50	Maximum	Once within 24 hours prior to release.																												
	Total Suspended Solids (mg/L)	< 6	Maximum																													
WM2	Total Nitrogen (µg/L)	<500	Maximum																													
WM3	Total Phosphorus (µg/L)	<50	Maximum																													
	Dissolved Oxygen (mg/L)	2	Minimum																													
	pH	6.5 – 8.5	Range																													
W7	Stormwater controls surrounding the ponds (e.g. spillways) must be sufficient to retain stormwater during 100 year ARI event.																															
W8	Any storage of excavated material must be above the expected flood level of a 1 in 100 year flood event.																															
W9	Stockpiles must have sufficient stormwater controls in place to prevent loss of material to any nearby waters or the bed and banks of any waters .																															

Definitions

Key terms and/or phrases used in this document are defined in this section. 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.

Activity 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.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

Background means noise, measured in the absence of the noise under investigation, as $L_{A\ 90, \text{adj}, T}$ 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.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Disturbed areas includes areas:

1. that are susceptible to erosion;
2. that are contaminated by the activity; and/or
3. upon which stockpiles of soil or other materials are located.

Environmental nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

Land means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes tidal land).

$L_{A10, \text{adj}, 10 \text{ mins}}$ means the A weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

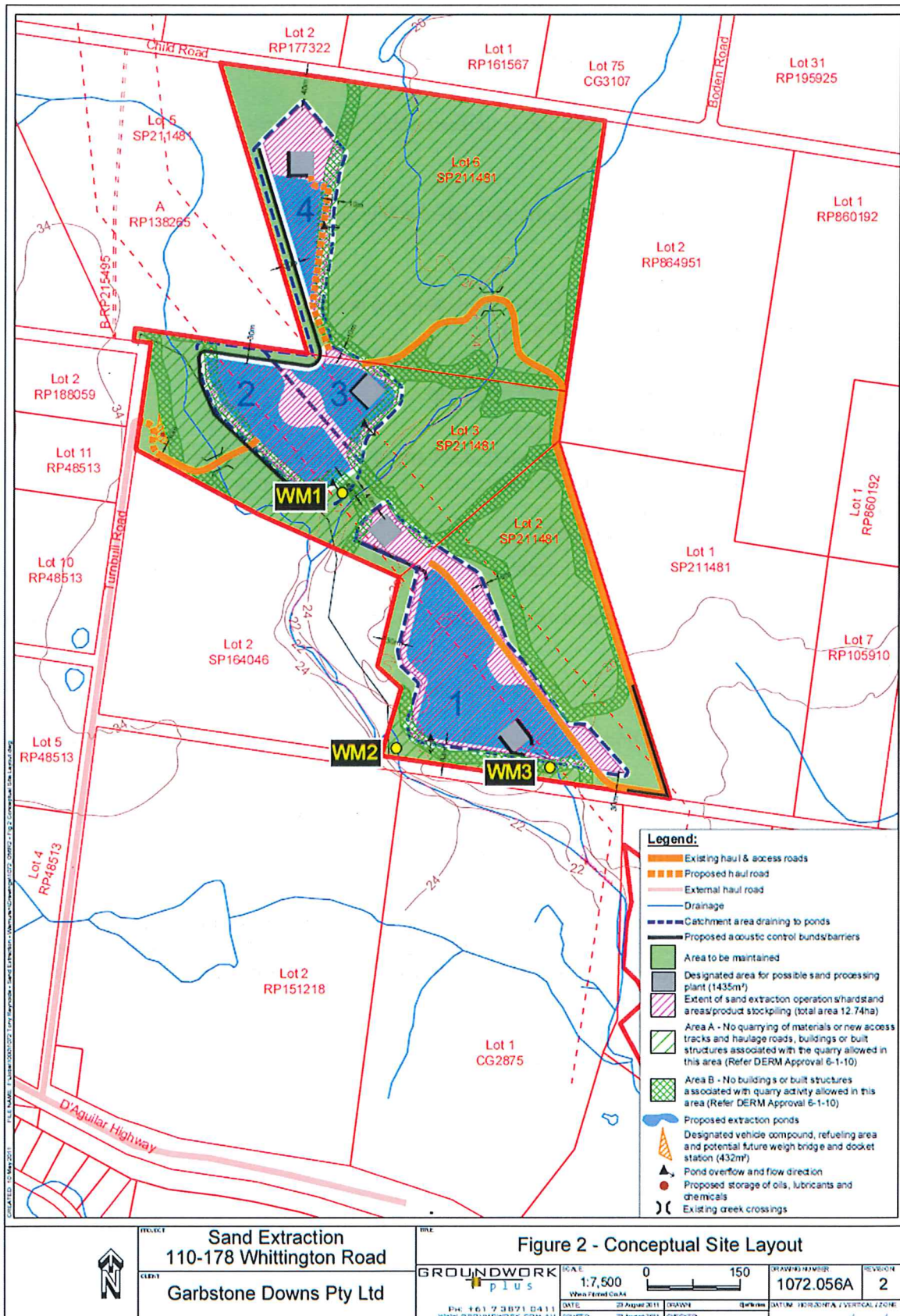
$L_{A1, \text{adj}, 10 \text{ mins}}$ means the A weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

Max $_{LpA, T}$ means the maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

Measures has the broadest interpretation and includes:

- Procedural measures such as standard operating procedures for **dredging** operations, environmental risk assessment, management actions, departmental direction and competency expectations under relevant guidelines
- Physical measures such as plant, equipment, physical objects (such as bunding, containment systems etc.), ecosystem monitoring and bathymetric surveys.

Appendices



END OF ENVIRONMENTAL AUTHORITY



Nominated delegate means another government agency that provides services to the **administering authority**.

Noxious means harmful or injurious to health or physical well-being.

Offensive means causing offence or displeasure; is unreasonably disagreeable to the senses; disgusting, nauseous or repulsive.

Prescribed water contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Release of a contaminant into the environment means to:

- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Tidal land means land that is submerged at any time by tidal water.

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.

You means the holder of the environmental authority.