Permit

Environmental Protection Act 1994

Environmental authority EPPR03433515

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

Environmental authority number: EPPR03433515

Environmental authority takes effect on 1 September 2021**.**

The anniversary date of this environmental authority is 22 January each year.

Environmental authority holder(s)

Name(s)	Registered address
RTA Weipa Pty Ltd	123 Albert Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening - 1(b) - Dredging, in a year, the following quantity of material - more than 10,000t but not more than 100,000t	14/SP120446

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:

ABN 46 640 294 485

Queensland Government

- 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 on 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.

The anniversary day of this environmental authority is the same day each year as the original take effect date unless you apply to change the anniversary day. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

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.

Amanda Gray	1/9/2021
Signature	Date

Amanda Gray
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Permit and Licence Management
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Privacy statement

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the

public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

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 Resources (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 https://www.rshq.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. If you are unsure that you have the most current version of the environmental authority relating to this site please visit https://apps.des.qld.gov.au/env-authorities/ to access all environmental authorities currently approved.

Conditions of environmental authority

<table>
<tr><th colspan="2">Agency Interest: General</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>G1</td><td>The operator must ensure that environmental harm is not caused by this ERA except where specifically permitted by a condition of this development permit.</td></tr>
<tr><td>G2</td><td>Activities under this environmental authority must be conducted in accordance with the following limitations:

1. Dredging may only occur in accordance with the following plans:
(i) Dredge Areas, as shown on plan “Dredging – Sites on EMR”, prepared by Jacobs, dated 19.06.2015.
(ii) Dredging Works Permit Plan, prepared by Jacobs, dated 27.04.2015, drawing number IH062300-5840-ESO-DG-05201, version 00A.
(iii) Dredging Works Permit Sections, prepared by Jacobs, dated 27.04.2015, drawing number IH062300-5840-ESO-DG-05210, version 00A.

2. Maximum extraction of 21,390m^3 per annum;

3. Placement of dredged material at sea may only occur within a radius of 1.1 nautical miles (2,037m) of the point located at the coordinates described in ‘Table G1 – Geographical Coordinates of Dredged Material Placement Area’ as shown in the area labelled ‘Albatross Bay Spoil Ground (New)’, on plan “Placement Area (Old vs New)”, prepared by Jacobs, dated 13.05.2021.

Table G1 – Geographical Coordinates of Dredged Material Placement Area
<table>
<tr><th>Latitude</th><th>Longitude</th></tr>
<tr><td>-12.659717°</td><td>141.637922°</td></tr>
<tr><th>Easting</th><th>Northing</th></tr>
<tr><td>569271.48</td><td>8600409.93</td></tr>
</table></td></tr>
<tr><td>G3</td><td>The operator must:
(a) Install all measures, plant and equipment necessary to ensure compliance with the conditions of this Environmental Authority
(b) Maintain and calibrate such measures, plant and equipment in an efficient condition and keep records of the maintenance
(c) Operate such measures, plant and equipment in an efficient manner.</td></tr>
<tr><td>G4</td><td>Capital and maintenance dredging activities must be in accordance with the respective Final Dredge Management Plan – River Facilities or subsequent versions as approved by the administering authority.</td></tr>
</table>

G5	Any **dredging** must be conducted using equipment that is in survey and registered and, in relation to environmental performance, is equal to or better than the following equipment: (a) Trailing Suction Hopper Dredge that is equipped, as a minimum, with: (i) Below keel discharge of tail wters cia an anti-turbidity control valve (ii) On board systems for determining solids to water ratio or density of dredge material (iii) Electronic positioning and depth control system for defining the location and depth of dreding activities (iv) Dredge heads and depth control capable of, and where appropriate, fitted with fauna exclusion devices (e.g. turtle deflectors). (b) Cutter Suction Dredge that is equipped, as a minimum, with: (i) Electronic positioning and depth control system for defining the location and depth of **dredging** activities (ii) A system or process to ensure the delivery system integrity is maintained at all times (iii) Systems for determining solids to water ration or density of dredged material during operations. (c) Grab Dredge that is equipped, as a minimum, with: (i) Electronic positioning system for defining the location and depth of **dredging** activities. (d) Backhoe Dredge that is equipped, as a minimum, with: (i) Electronic positioning system for defining the location and depth of the **dredging** activities.
G6	No change, replacement or alteration of any plant or equipment is permitted if the change, replacement or alteration increases, or is likely to increase the risk of environmental harm above that expressly provided in this approval.
G7	A copy of this authority must be kept in a location readily accessible to personnel carrying out the **activity**.
G8	Record, compile and keep all monitoring results required by this authority and present this information to the **administering authority** upon request.
G9	The holder of this authority must notify the **administering authority** by telephone, email or facsimile as soon as reasonably possible (but no later than twenty-four (24)) hours after becoming aware of: (a) Any emergency event or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this approval; or (b) Any monitoring result that indicates an exceedance of any environmental approval limit.
G10	The notification must include, but not be limited to the following:

	(a) The development approval number and name (b) The name and telephone number of the designated contact person (c) The location of the emergency event or incident (d) The date and time of the emergency event or incident (e) The time you became aware of the emergency event or incident (f) The estimated quantity and type of substances involved in the emergency event or incident, if known (g) The cause of the emergency event or incident if known (h) A description of the nature and effects of the emergency event or incidents including risks to the environment, public health or live stock, if known (i) Immediate actions taken to prevent or mitigate any further environmental harm caused by the emergency event or incident (j) Details of any notification of persons who may be affected by the emergency event or incident.
G11	Within fourteen (14) days (or as otherwise agreed) following the initial notification of an emergency event, incident or exceedance, further written advice must be provided to the **administering authority** including the following: (a) Results and interpretation of any samples taken and analysed (b) Outcomes of actions taken at the time to prevent or minimuse unlawful environmental harm (c) Proposed actions to prevent a recurrence of the emergency event, incident or exceedance.
G12	Appropriate spill kit(s) and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.
G13	All relevant personnel operating under this approval must be trained in the use of the spill kit(s).
G14	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this development approval must be calibrated and appropriately operated and maintained.
G15	All persons engaged in the conduct of the **dredging** activities, including but not limited to eomployees and contract staff, must be: (a) Trained in the procedures and practices necessary to: (i) Comply with the conditions of this environmental authority (ii) Prevent environmental harm during normaloperation and emergencies, or (b) Under the close supervision of such a trained person.
G16	The **administering authority** must be advised in writing of the date of commencement of a capital or maintenance dredge campaign at least 5 business days prior to that date.

G17	The **administering authority** must be advised within ten (10) days following completion of the capital or maintenance **dredging** campaigns.
Agency Interest: Air	
A1	The release of airborne contaminants from the **activity** must not cause environmental nuisance.
Agency Interest: Water	
WT1	In carrying out the ERA **dredging activity**, the release of contaminants (including any release caused by extraction of material from the bed of **waters**) must: (a) Only occur from the permitted areas specified on approved plans (b) Be suitable for unconfined ocean disposal when assessed I accordance with the *National Assessment Guidelines for Dredging* (c) Not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scume, litter or other objectionable matter (d) Be carried out taking all practicable **measures** necessary to minimimse the concentration of suspended solids released during the loading and pumpout of the vessel
WT2	**Dredging** must not start until provision has been made to lawfully place or dispose of the dredge material. Evidence of applicable approvals must be made available to the **administering authority** when requested.
WT3	All reasonable and practicable **measures** shall be taken to limit the potential turbidity.
WT4	Where trailer suction **dredging** is carried out, an effective turtle exclusion device must be fitted to the dredge head. Evidence that this device has been installed and used on the dredge for the entire period of the **dredging activity** must be provided to the administering authority.
WT5	Mobile **dredging** operations: (a) Must not commence if dugongs, turtles, or cetaceans are observed within 300 metres of the dredge (b) Where underway, must alter course if dugongs, turtles, or cetaceans are likely to be struck or captured.
WT6	Stationary **dredging** operations: (a) Must not commence if dugongs, turtles, or cetaceans are observed within 300 metres of the dredge (b) Must cease if dugongs, turtles or cetaceans are observed within 50 metres of the dredge head.
WT7	Operating procedures that minimise the risk of turtle capture by the dredge headm and the risk from all activities of injury to marine species of conservation significance, must be developed prior to the commencement of **dredging** activities.
WT8	The **administering authority** is to be immediately notified of any turtle captures by the dredge or of injury to any marine species of conservational significance.

WT9	Turtle monitoring: (a) Daily monitoring for impacted turtles must be undertaken at the dredge and at the shoreline down-current from the **dredging** operation (b) If monitoring indicates that more than two turtles are killed within a 24 hour period as a result of **dredging**, the dredge must relocate from the area until an incident investigation has been carried out and relevant preventative actions are implemented (c) A trailer suction hopper dredge must be fitted with marine wildlife protection or exclusion devices such as deflector plates, tickler chains or drag heads prior to and during operation.
Agency Interest: Noise	
N1	Noise from **dredging** activities must not cause environmental nuisance at a nuisance sensitive place.
N2	When requested by the administering authority, noise monitoring and recording must be undertaken within a timeframe nominated by the **administering authority** to investigate any complaint of environmental nuisance (considered in the opinion of anauthorised officer to be neither frivolous or vexatious) at any **sensitive place** or commercial place, and the results must be provided to the **administering authority** within fourteen (14) days following completion of monitoring.
N3	Noise monitoring and recording must include the following descriptor characteristics and matters: (a) **LAeq**, and LAN (where N equals the statistical levels of 1, 10 and 90 and T= 60 mins) (b) **Background** noise LA90 (c) The level and frequency of occurrence of impulsive or tonal noise and any adjustment and penalties to statistical levels (d) Atmospheric conditions including temperature, relative humidity and wind speed and directions (e) Effects due to any extraneous factors such as traffic noise (f) Location, date and time of monitoring (g) If the complaint concerns low frequency noise, Max, LpLIN, T (h) If the complaint concerns low frequency noise, one third octave band measurement in dB(LIN) for centre frequencies in the 10-220Hz range.
N4	The method of measurement and reporting of noise levels must comply withthemost recent edition of the administering authority's *Noise Measurement Manual* or the most recent version of *Australian Standard AS1055 Acoustics – Description and measurement of environmental noise.*
Agency Views: Land	
L1	Dredge material must not be disposed of on land unless otherwise authorised.
Agency Views: Waste	

WS1	Waste generated in the carrying out of the activities must be stored, handled and transferred in a proper and efficient manner.
Agency Views: Social	
S1	The operator of the ERA must record the following details for all complaints received and provide to the **administering authority** upon request: (a) Time, date, name and contact details of the complainant (b) Reasons for the complaint (c) Details of investigations undertaken (d) Conclusions formed (e) Actions taken to resolve the complaint

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 Science or its successors or predecessors.

Appropriately 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 authoritiative assessment, advice or analysis to performance relative to the subject matter using the relevant protocols, standards, emthods or literature.

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.

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

Dredging includes extraction of mud, sand, coral, ballast, shingle, gravel, clay, earth and other material from the bed of the Queensland tidal and non-tidal **waters**. Dredging does not include the banks of the waterway.

$\mathbf{L_{Aeq\ adj,T}}$ means the adjusted A-weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

$\mathbf{Max_{LpA,T}}$ means the macimum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

Measures has the broadest interpretation and includes plant, equipment, physical objects, bunding, containment systems, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

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

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

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

Release of a contaminant to the environment means to:

- Deposit, discharge, emit or disturb the contaminant
- Cause or allow the contaminant to tbe deposited, discharged, emitted or disturbed
- Fail to prevent the contaminant from ebing 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 withinthe curtilage of such a place reasonably used by a person at that place:

- A dwelling, residential allotment, movile home or caravan park, residential marina or other residential premises; or
- A motel, hotel or hostel; or
- A kindergarten, school, university or other educational institution, or
- A medical centre or hospital; or
- A protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- A public thoroughfare, park or gardens; or
- For noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

Substantial low frequency noise means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurement, with a predominant component with the frequency range 10 to 200Hz. It includes any noise emission likely to cause an overall sound pressure level at a sensitive place exceeding 55dB(Z).

24 hour storm event with an average recurrence interval in 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 withan 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.

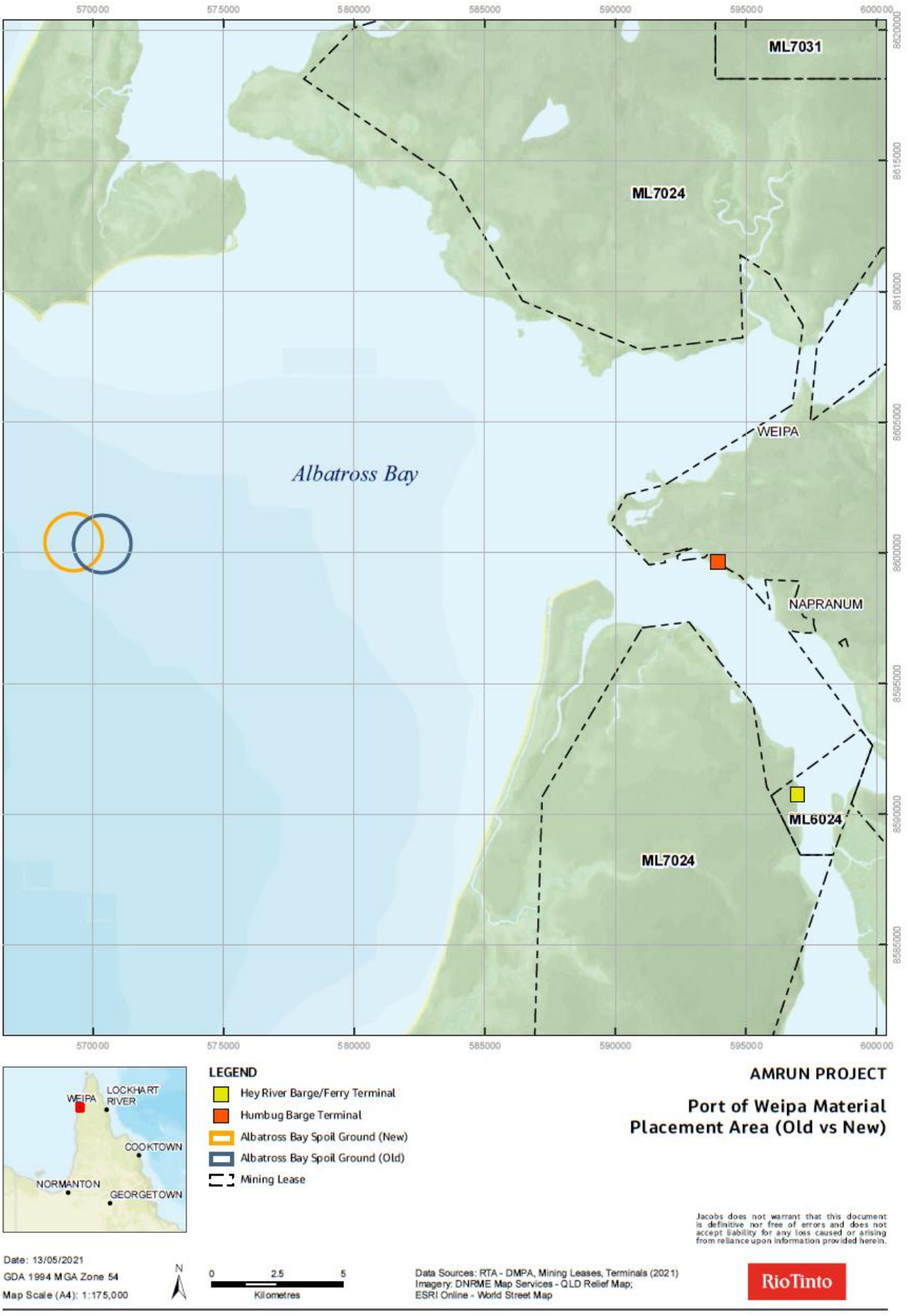
Vibration is the oscillating or periodic motion of a particle, group of particles, or sold object about its equilibrium position.

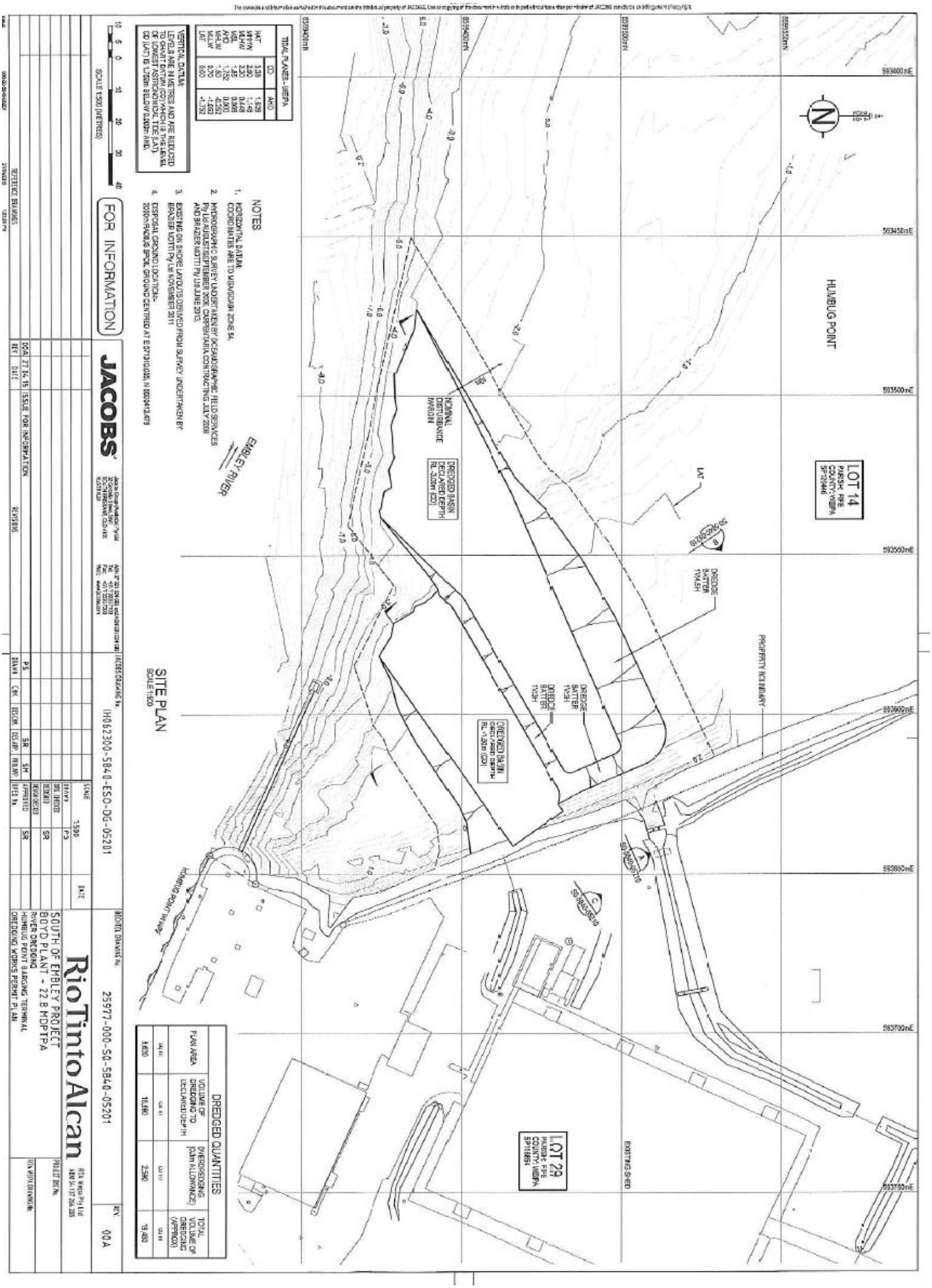
Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drainm roadside gutter, stormwater run-off,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

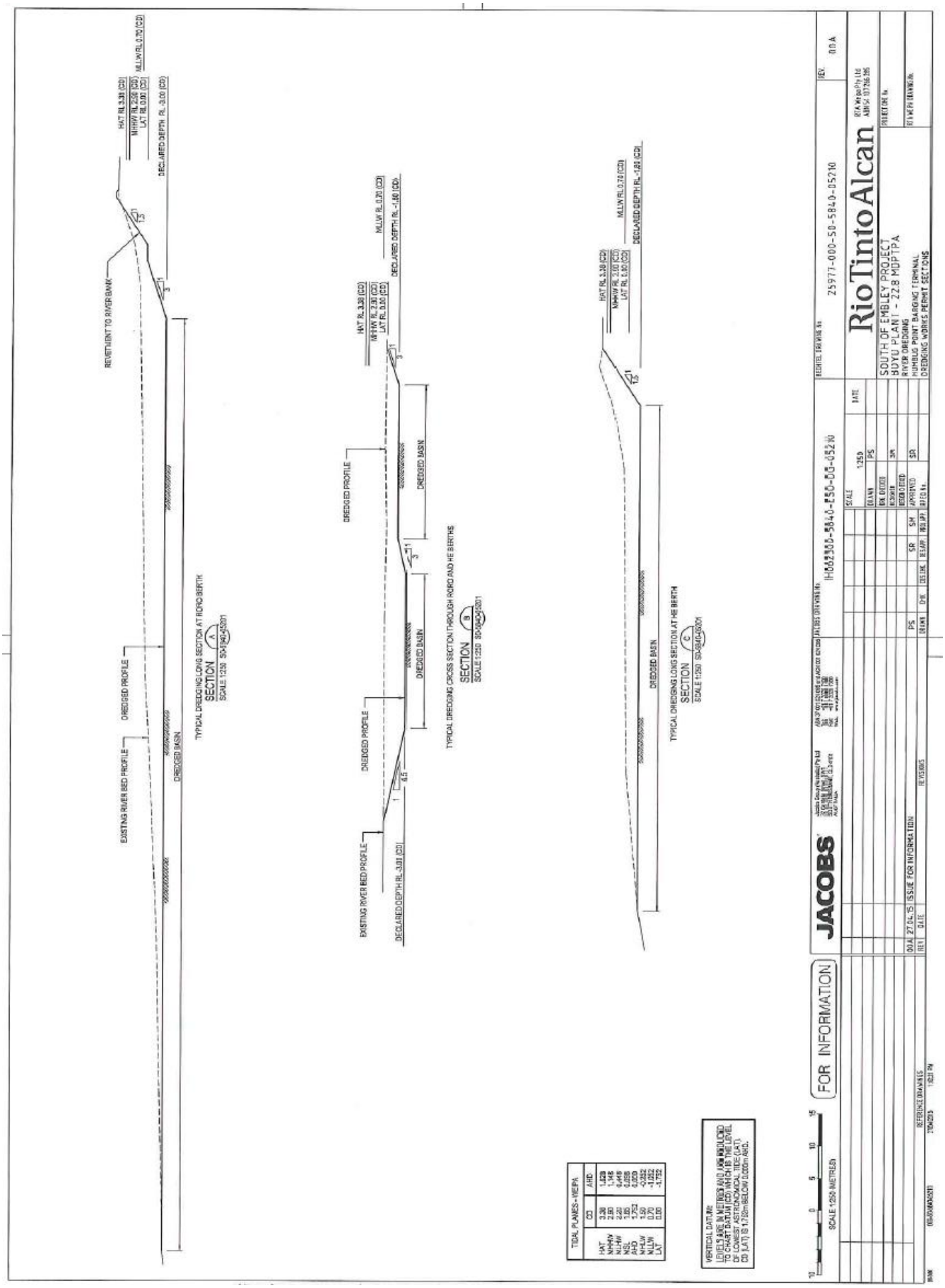
You means the holder of the environmental authority.

Appendices


Rio Tinto Alcan
Legend
Sites listed on the Environmental Management Register from historical lots associated with Lot 14 on SP120446
Cadastre
Nominal Disturbance Margin
Dredge Areas
South of Embley Project
Figure 5-3
Off-lease River Dredging - Sites on EMR
8599000
8599500
8600000
8600500
592000
592500
593000
593500
594000
Mesh Coastal Bait Plant Evans Landing South
Lot 14 SP120446
Lot 4 SP120447
Lot 5 SP120447
Weipa Sewage Treatment Plant
Humbug Wharf Dredge Disposal Area


570000
575000
580000
585000
590000
595000
600000
8620000
8615000
8610000
8605000
8600000
8595000
8590000
8585000
ML7031
ML7024
WEIPA
Albatross Bay
NAPRANUM
ML6024
ML7024
WEIPA
LOCKHART RIVER
COOKTOWN
NORMANTON
GEORGETOWN
LEGEND
Hey River Barge/Ferry Terminal
Humbug Barge Terminal
Albatross Bay Spoil Ground (New)
Albatross Bay Spoil Ground (Old)
Mining Lease
AMRUN PROJECT
Port of Weipa Material Placement Area (Old vs New)
Jacobs does not warrant that this document is definitive nor free of errors and does not accept liability for any loss caused or arising from reliance upon information provided herein.
Date: 13/05/2021
GDA 1994 MGA Zone 54
Map Scale (A4): 1:175,000
N
0
2.5
5
Kilometres
Data Sources: RTA - DMPA, Mining Leases, Terminals (2021)
Imagery: DNRME Map Services - QLD Relief Map;
ESRI Online - World Street Map
RioTinto


HUMBUG POINT
LOT 14
PLAN# RP8
COUNTY: HERB
SP104446
LOT 29
PLAN# FEE
COUNTY: HERB
SP116851
PROPERTY BOUNDARY
EXISTING SHED
DREDGED BASIN DESIGNED DEPTH RL -5.00m (CD)
DREDGED BASIN DESIGNED DEPTH RL -1.80m (CD)
NOMINAL DISTURBANCE MARGIN
DREDGE BATTER 1V:3H
DREDGE BATTER 1V:4.5H
LAT
EMBLEY RIVER
SITE PLAN
SCALE 1:500
NOTES
1. HORIZONTAL DATUM: COORD MATES ARE TO MGA94/GDA94 ZONE 54.
2. HYDROGRAPHIC SURVEY UNDERTAKEN BY OCEANSTRAPHIC FIELD SERVICES Pty Ltd AUGUST/SEPTEMBER 2005, CARPENTARIA CONTRACTING JULY 2008 AND BRAZIER MOTTI Pty Ltd JUNE 2013.
3. EXISTING ON SHORE LAYOUTS DERIVED FROM SURVEY UNDERTAKEN BY BRAZIER MOTTI Pty Ltd NOVEMBER 2011
4. DISPOSAL GROUND LOCATION: 20300m RADIUS SPOIL GROUND CENTRED AT E 571910.000m, N 8604613.487m
TIDAL PLANES - WEIPA
VERTICAL DATUM: LEVELS ARE IN METRES AND ARE REDUCED TO CHART DATUM (CD) WHICH IS APPROXIMATELY EQUAL TO LOWEST ASTRONOMICAL TIDE (LAT) OR (LAT) IS 1.750m BELOW ELADD (m AHD.
DREDGED QUANTITIES
PLAN AREA
VOLUME OF DREDGING TO DESIGNED DEPTH
OVERDREDGING (0.5m ALLOWANCE)
TOTAL VOLUME OF DREDGING (APPROX)
8.630
16.680
2.590
19.483
FOR INFORMATION
JACOBS
IH062300-5840-ESO-DG-05201
25977-000-SO-5840-05201
00A
Rio Tinto Alcan
SOUTH OF EMBLEY PROJECT
BOYD PLANT - 22 B MDPTPA
RIVER DREDGING
HUMBUG POINT BARGING TERMINAL
DREDGING WORKS PERMIT PLAN
ISSUE FOR INFORMATION
REFERENCE DRAWINGS


TYPICAL DREDGING LONG SECTION AT RORO BERTH
SECTION A
SCALE 1:250
EXISTING RIVER BED PROFILE
DREDGED PROFILE
DREDGED BASIN
RETENTION TO RIVER BANK
HAT RL 3.33 (CD)
MHHW RL 2.58 (CD)
LAT RL 0.00 (CD)
MLLW RL 0.70 (CD)
DECLARED DEPTH RL -3.00 (CD)
TYPICAL DREDGING CROSS SECTION THROUGH RORO AND HE BERTHS
SECTION B
SCALE 1:250
HAT RL 3.33 (CD)
MHHW RL 2.58 (CD)
LAT RL 0.00 (CD)
MLLW RL 0.70 (CD)
DECLARED DEPTH RL -1.80 (CD)
TYPICAL DREDGING LONG SECTION AT HE BERTH
SECTION C
SCALE 1:250
HAT RL 3.30 (CD)
MHHW RL 2.60 (CD)
LAT RL 0.00 (CD)
MLLW RL 0.70 (CD)
DECLARED DEPTH RL -1.80 (CD)
TIDAL PLANES - WEIPA
CD
AHD
HAT 3.30 1.429
MHHW 2.60 1.148
MLHW 2.20 0.448
MSL 1.85 0.098
MHLW 1.50 -0.253
MLLW 0.70 -1.052
LAT 0.00 -1.752
VERTICAL DATUM:
LEVELS ARE IN METRES AND ARE REDUCED TO CHART DATUM (CD) WHICH IS THE LEVEL OF LOWEST ASTRONOMICAL TIDE (LAT). CD (LAT) IS 1.752m BELOW 0.000m AHD.
FOR INFORMATION
JACOBS
25977-000-50-5840-05210
Rio Tinto Alcan
SOUTH OF EMBLEY PROJECT
BOYU PLANT - 22.8 MDPTPA
RIVER DREDGING
HUMBUG POINT BARGING TERMINAL
DREDGING WORKS PERMIT SECTIONS

END OF ENVIRONMENTAL AUTHORITY