Grants Rd Sand

1 January 2023 to 31 December 2023

PROJECT APPROVAL 08_0099

paa DESIGN
architecture
planning
urban design
landscape architecture
Peter Andrews + Associates
PTY LTD

March 2024

Project Summary

Name of Operation	Grants Road Sand Quarry
Name of Operator	Steven Jones
Development consent / project approval #	08_0099
	Modification to the Project Approval dated 4 May 2018
Environment Protection Licence	11240
Water licence #	WAL 17474; WAL36455; WAL 17440; WAL 36988; WAL37745; WAL37746
MOP/RMP start date	25 July 2014
MOP/RMP end date	30 June 2044
Annual Review start date	1 January 2023
Annual Review end date	31 December 2023
Name of authorised reporting officer	Vanessa Colclough
Title of authorised reporting officer	Environmental Planner / Director
Date	29 March 2024

Document History and Status

Project: 24_001
Client: Grants Road Sand Quarry

Version	Date issued	Issue	Author
A	24 March 2024	Issue to Client	VColclough
B	29 March 2024	Issue of 2023 Annual Review to the Department of Planning	VColclough

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APPENDICES

1. Introduction

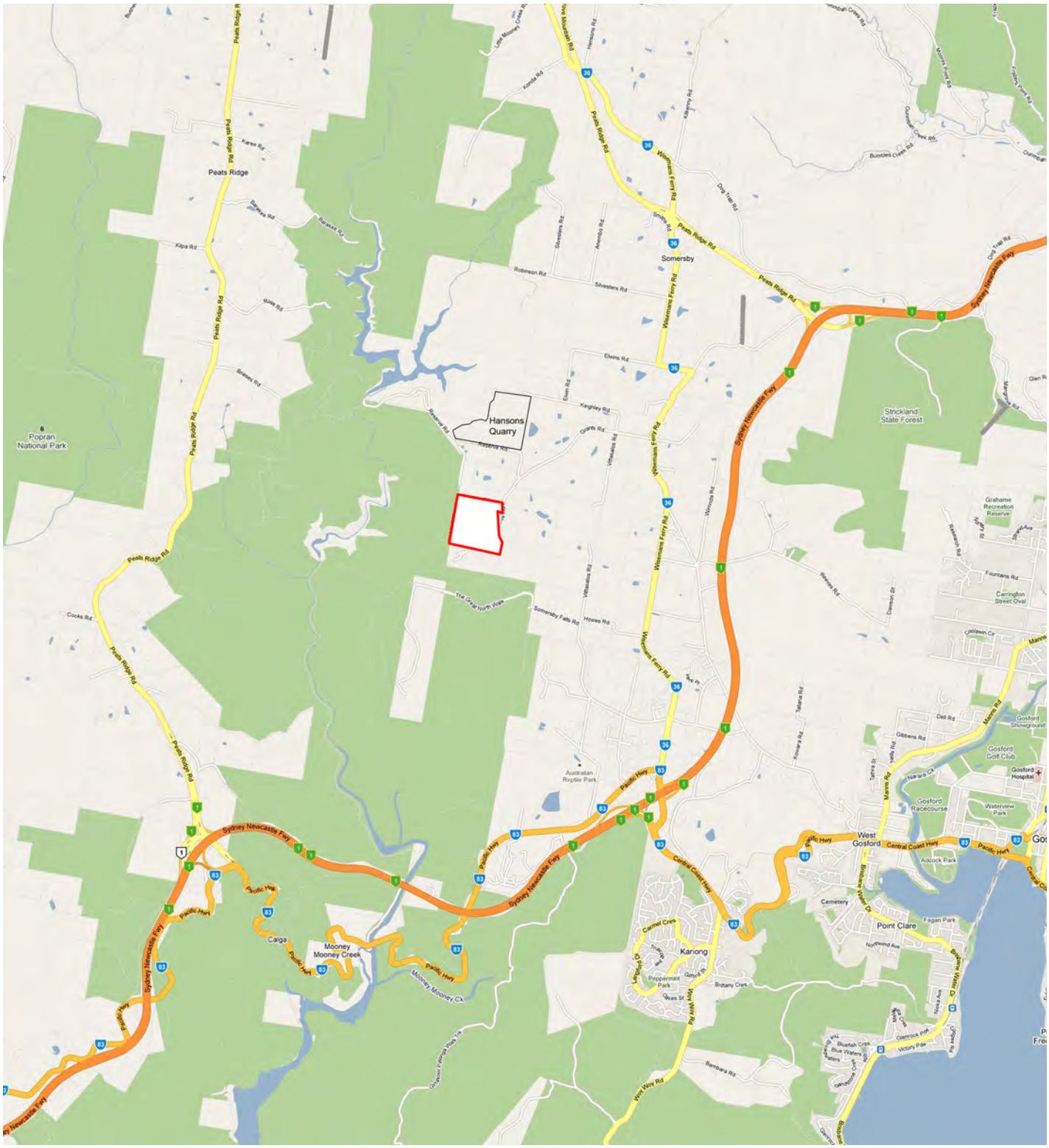
This Annual Review has been prepared for the Grants Road Sand Quarry located at 270 Grants Road, Somersby in accordance with Condition 4 Annual Review of Schedule 5 Environmental Management, Reporting and Auditing of the Project Approval 08_0099 dated 25 July 2014 and the Modification to the Project Approval dated 4 May 2018 and to satisfy the requirements of EPA modified Licence 11240. The Annual Review is for the period from 1 January 2023 to 31 December 2023 (the reporting period). Figure 1 shows the location and extent of the quarry. The Project Approval is included in Appendix 1 and Notice of Modification in Appendix 2.

The modification to the Project Approval was for the Environmental Assessment of the project titled Section 75W Modification Application for Changes to Biodiversity Offset Area for Approved Grants Road Sand Quarry Extension 270 Grants Road Somersby, dated December 2017 and supplementary ecological survey report titled Additional Ecological Information Report, dated March 2018.

This Annual Report provides a review of the activities that have occurred during the reporting period and documents the activities and environmental monitoring undertaken at the Quarry in 2023.

Schedule 5 condition 4 of the Project Approval and Modification requires that an Annual Review be undertaken by the end of March each year to review the environmental performance of the project. The Annual Review must:

> *(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;*
>
> *(b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the:*
>
> - *relevant statutory requirements, limits or performance measures/criteria;*
> - *requirements of any plan or program required under this approval;*
> - *monitoring results of previous years; and*
> - *relevant predictions in the EA;*
>
> *(c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;*
>
> *(d) identify any trends in the monitoring data over the life of the project;*
>
> *(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and*
>
> *(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.*



Source : Google Maps

Legend

The Site

North

Figure 1 - Locality Plan

Source : Google Earth 2022

Legend

The Site

North

Figure 2 - Aerial Photograph

2. Performance Requirements

2.1. Management

Grants Road Sand Quarry is under the management of Quarry Manager, Mr. Steven Jones. Whilst, all employees and contractors/suppliers have a responsibility for the effective and ongoing management of environmental impacts at the quarry, the Quarry Manager has specific duties and responsibilities including:

- Day to day implementation of the EMP.
- Ensuring site personnel have undertaken appropriate environmental awareness training and are observing all necessary management requirements.
- Ensure all required environmental auditing/monitoring is undertaken.
- Consultation with relevant stakeholders and complaints handling.

Contact details for any information in regard to the quarry or the operations can be directed as follows:

Quarry Manager – Mr Steven Jones - ph: 0418 116 861
Website - www.grantsrdsand.com.au
Email - info@grantsrdsand.com.au
Address - 270 Grants Road, Somersby NSW 2260

2.2. Hours of operation

The hours of operation for the quarry and for construction activities are:

- Monday to Friday 7.00am to 6.00pm; and
- Saturdays from 7.00am to 1.00pm.

Other activities, e.g. maintenance carried out on site may be conducted outside the above hours if conducted in a manner that is inaudible at all privately-owned residences. The following activities may be carried out on the site outside the above hours:

- Delivery or dispatch of materials as requested by the Police or other authorities; and
- Emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

In such circumstances, the Proponent shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter. No such circumstances occurred during the reporting period.

2.3. Licences

The Licences held for the quarry during the reporting period are listed in the following table.

Table 1 – Licences

Approval / Licence	Approval / Licence Number	Issue Date	Expiry Date
Project Approval	08_0099	25 July 2014	30 June 2044
Environment Protection Licence	11240	13 October	
Water Licence	WAL 17474	11 December 2012	
Water Licence	WAL36455	1 November 2013	
Water Licence	WAL 17440	24 April 2014	
Water Licence	WAL 36988	13 January 2015	
Water Licence	WAL37745		
Water Licence	WAL37746		

2.4. Approval Requirements

The requirements and compliance under the Project Approval are outlined in Appendix 3 for the project. Additional information regarding the monitoring of the project is outlined in Section 4 of this Annual Review.

3. Activities undertaken during the Reporting Period

3.1. Activities

The following outlines the key activities undertaken at Grants Road Sand Quarry during the reporting period.

Table 2 – Key Activities

Month	Activities
January	• Updating the website throughout the year with relevant reports. • Weed management undertaken throughout the year. • Maintaining equipment and implementing improvements to machinery to reduce any impacts.
February	• Site activities in working areas A, B, C and E/F. • Precinct A & B – Rock cutting and hammering to remove blocks. Forklift transporting blocks to sales loading area. • Precinct C – No activity • E – Water Storage • Precinct F – Dozer ripping/extracting sandstone and pre screening of sandstone for wash plant. • Quarry planning for the next calendar year i.e., areas and depths and earth mounding. • Southern earth mound will continue along the southern boundary of the quarry as soil is stripped off the site. • Precinct A & B varying depths 15-31 metres. • Precinct F continue ripping sandstone.
March	• Submission of the 2022 Annual Report to the Department of Planning.
April	• Lodgement of updated Plan of Management for Air Quality to the Department of Planning.
May	
June	
July	• Replacement of the rain gauge. • Maintenance of the HVAS to rectify data capture. • Community consultative meeting held.
August	
September	
October	
November	
December	• Various monitoring undertaken throughout the year for the Annual Review.

Source: Grants Road Sand Quarry 2023

3.2. Quarrying and Extraction

The annual production for the quarry for the period from 1 January to 31 December 2023 is outlined below.

Table 3 – Production Summary

Material	Approved limit (Project approval MP_00800	Previous reporting (actual)	This report period (actual)	Next reporting period (forecast)
Sand and sandstone products	250,000 tonnes per annum	143658.52 tonnes	168159.04 tonnes	160 000 tonnes

4. Environmental Monitoring

Grants Road Sand Quarry engaged the various consultants to undertake the environmental monitoring of the quarry site in accordance with Project Approval 08_0099 and Notice of Modification dated 4 May 2018. The following provides a summary of the monitoring and the environmental monitoring reports are attached in the relevant appendices.

4.1. Water Quality

The Water Quality Monitoring Report including surface water and ground water has been prepared by Larry Cook Consulting Pty Ltd and is attached in Appendix 4.

Water level monitoring is undertaken in one (1) dedicated monitoring bore. Water quality sampling and testing is carried out in two monitoring bores and at three surface water monitoring sites. The Water Monitoring Sites are identified in the following table. Regular water sampling was undertaken from 1 January to 31 December 2023.

Table 4 – Register of Water Monitoring Sites

Monitoring Site	Monitoring Type	Location	Monitoring
W1	Surface Water	North-west discharge point	Water quality
W4	Surface Water	New discharge into new dam in south western corner of Lot 1	Water quality
S1	Surface Water	South-west waterway on western boundary of Lot1	Water quality
G3 (BH 3)	Groundwater	Bore in NW corner of Lot 1 (control bore)	Water quality and automated water level
DDH 1	Groundwater	Northern central part of Lot 1	Automated water level

Summary of the results:

GEOCHEMISTRY

- The pH of the surface water sampled is slightly acidic that reflects rainwater recharge over the quarry precinct and potential mixing with local groundwater hosted by the Hawkesbury Sandstone. The recorded pH measurements are within the range of acceptable and agreed discharge levels.
- The relatively lower pH values recorded in the groundwater samples reflects recharge by rainwater with low concentrations of dissolved carbonic acid and retention of water within the Hawkesbury Sandstone host. These levels are 'low' but often typical of groundwater hosted by the Hawkesbury Sandstone in the Mangrove Mountain area and wider Sydney Basin geological sequence.
- The concentrations of Total Suspended Solids (TSS) recorded in groundwater samples were all less than the LOR however, low TSS levels were recorded in the two surface water samples which are less than the discharge level limit.
- Trace levels of phosphorus in surface water samples and low levels of nitrate+nitrite in groundwater samples likely reflect the 120-year agricultural history in the district (fertilisers and chicken growing).
- No significant impacts from current approved quarrying activities on this sandstone-hosted aquifer system were detected.

WATER LEVEL MONITORING

- The hydrograph for the sandstone-hosted monitoring bore DDH1 displays a positive correlation between water table fluctuations and rainfall events and rainfall amounts. However, the relationship is relatively subdued, and the response slightly delayed which is typical of hardrock-hosted aquifers with no direct connection with the atmosphere.
- No potential impacts from approved quarrying activities on this aquifer system were detected.

4.2. Noise

A site attended noise audit was undertaken of the quarry on 10 January 2024 by Atkins Acoustics and Associates Pty Ltd and is attached in Appendix 5. The results of the audit are as follows.

Site inspections during the audit identified that onsite extraction and processing was established in Areas A, B and C.

Activities included:

- Dozer and excavator mid-floor Area A.
- Truck out loading south western Area A.
- Washing Plant south western Area A.
- Dam water pump Area C.

Site inspection and attended noise audits were conducted between 7.00am and 9.30am on Wednesday 10 January 2024. Weather observations and conditions reported at the onsite weather station during the audit were light south-east to south-west breeze (1.4 - 1.5m/sec), and air temperature 18-20°C.

The site attended sound pressure level measurements were conducted at three (3) locations selected to represent the residential receivers identified in Grants Road Sand Noise Management Plan. The reference measurement locations are:

- Location 1: 'Ibels' - 380 Somersby Falls Road
- Location 2: 'McGregor' - 239 Grants Road
- Location 3: 'Sammut' - 210 Grants Road

The noise measurement instrumentation selected comprised a SVAN949 Sound and Vibration Analyzer. The meter was programmed to calculate and record 15 minute statistical levels. Attended measurements during the audit where appropriate were used to assess source noise contributions associated with Grants Road Sand Quarry operations. A summary of the measurement results and calculated contributions is presented in the following table. Measurements at all reference assessment locations were influenced by bird and insect noise.

Table 5 – Audit Measurement Results – January 2024

Measured Ambient Sound Pressure Levels dBA				Grants Road Sand Contribution	Comments
L_{Aeq}	L_{A10}	L_{A90}	L_{A1}	$L_{Aeq,\ 15min}$*	
Location 1: Ibels Residence – 380 Somersby Falls Road					
41.9	39.0	34.1	52.0	<35	GRS truck onsite. LAmax 40/1dBA; Saw cutting, Distant road traffic; Insects; Birds.
Location 2: McGregor Residence – 239 Grants Road					
44.6	42.9	36.8	57.1	<38	GRS truck onsite. LAmax 38/9dBA; Saw cutting, Distant road traffic; Insects; Birds.
Location 3: Sammut Residence – 210 Grants Road					
39.4	42.0	35.4	60.0	<35	Distant road traffic; Insects; Birds; GRS not audible.

The findings of the measurement results show that noise from Grants Road Sand Quarry activities complied with the DoPE (*Application Number 08_0099, MOD 1),* noise condition LAeq, 15min 40dBA and EPA Licence 11240.

The Site Manager confirmed that a noise related incident was reported during the previous twelve (12) months. Investigations conducted by GRS concluded no details were provided in regard to the alleged noise source(s), day and time of the alleged incident or the location of the person(s) reporting the incident(s).

A review of the audit measurement results and previous reported audit measurements has shown that noise contributions from Grant Road Sand Quarry have remained steady.

4.3. Air Quality

Baseline air quality and meteorological reporting has been undertaken for the site by ERM Australia Pacific Pty Ltd and is attached in Appendix 6. All monitoring for air quality is conducted in accordance with the NSW Environmental Protection Agency (EPA).

The automatic weather station (AWS) and High Volume Air Sampler (HVAS) are located onsite and are used to provide the baseline monitoring for the quarry site. However, data capture for all meteorological parameters were low: 69% for temperature, 16% for rainfall and 6% for wind speed and direction. The data portal stopped receiving any meteorological data after 09 September 2023, suggesting a telemetry issue. Wind data was only available until 22 January 2023, suggesting an issue with the wind sensor. The rain gauge that was not operating properly during 2022 was replaced on 12 July 2023.

Given the low data capture from the Grants Road AWS, data from the Bureau of Meteorology at Gosford was used to supplement the on-site monitoring. The dominant winds for the annual period were from the east, northeast and south in spring and summer and dominants winds from the west and northwest in autumn and winter. The average wind speed for the period was 1.9 m/s and the percentage occurrence of calm wind conditions (less than or equal to 0.5 m/s) was 27.7 %. June was the coldest month on average with December the hottest month on average. A maximum daily average of 28.7°C was recorded on both 6 March and 14 December 2023.

The results for the available PM_{10} data in 2023 are of a possible sixty samples (over approximately 12 months), fifty-six (56) samples are reported, resulting in a data recovery rate of approximately 93%. For reference, this data capture is below the recommended 95% but above the absolute minimum of 75% for data completeness for averaging purposes specified for reporting under the National Environment Protection Measure for Ambient Air Quality (Peer Review Committee, 2001).

The average PM10 concentration over the recorded 12-month period was 5.1 $\mu g/m^3$. All reported results are below the EPA maximum 24-hour average criterion of 50 $\mu g/m_3$ for PM_{10}.

Dust deposition is measured at two locations, R1 and R4. The annual average monthly dust deposition level (insoluble solids) for the period of 2023 was 0.3 g/m^2/month at R1 and 0.2 g/m^2/month at R4. The results are well below the EPA cumulative annual average criterion of 4 g/m^2/month. A maximum value of 0.9 g/m^2/month was recorded in November at R1.

The dust sample collected by the deposition gauges includes both dust generated by site activities (incremental dust impact) and dust from all other local sources (background dust levels). Even with the background levels accounted for, the annual average deposition levels are considerably below both the incremental and cumulative annual criteria.

A number of crystalline silica measurements were taken on 15 June 2023, 18 October 2023 and 7 December 2023. The samples were measured over the course of a shift, using personal air-samplers in the breathing zone of operators on dozers, excavators and loaders at the site. The results collected are corrected for the number of hours worked in a shift. These are presented in reports by WorkPlace Environment Consultants (WEC, 2023a, 2023b, 2023c).

Levels were below the relevant workplace health and safety standards in the Q2 and Q4 monitoring events. In the Q3 monitoring exercise, the RCS level sampled with the bulldozer operator was above the standard, which is a notifiable event to NSW Resources Regulator. Grants Road Sand has advised that the NSW Resource Regulator was notified on 28 November 2023 of the high RCS exposure result. Grants Road has also supplied the contractor for the bulldozer (EarthMax) with instructions to promote compliance. These included ensuring that the dozer operator made use of appropriate respiratory protection, investigating cabin seals and ventilation, and conducting additional monitoring within two months to demonstrate compliance in order to continue operating at the site.

4.4. Groundwater Dependent Ecosystems

The Groundwater Dependent Ecosystems monitoring report was undertaken by Integrated Site Planning and is attached in Appendix 7.

The monitoring program for the Groundwater dependent ecosystems consists of a combination of aerial photograph assessment and mapping of GDEs within the predicted drawdown area, floristic plot surveys and field assessment for indicators and signs of potential project related impacts. The following variables were measured:

i. *Native Plant Composition*
Plot surveys were completed comparing the results of the baseline plot monitoring results from the initial monitoring period with the current plot conditions. The native flora species present and projected foliage cover were assessed. Comments are provided for the species observed, including GDE species, which are reliant on moist soil conditions.

ii. *Exotic Plant Composition*
All exotic flora species and total cover of exotic flora species were recorded for each plot.

iii. *GDE Extent and Distribution*
Mapping of GDE's was informed by aerial photograph analysis and interpretation using Nearmap imagery dated 15 August 2022.

iv. *Vegetation Photo Point Monitoring*
Photographs were taken for each monitoring quadrat from each cardinal point.

v. *Surface Erosion and Sedimentation Monitoring*
A visual inspection of the GDE patches downslope from the quarry site was undertaken to monitor for any surface erosion or sedimentation impacts from the quarry operations.

The review of the Groundwater Dependent Ecosystems concludes that all performance targets have been met for GDEs and requirement for mitigation or response measures has not been triggered in relation to 2023 site operations.

4.5. Somersby Mintbush Monitoring

The annual monitoring report for Somersby Mintbush *Prostanthera junonis* has been prepared by Integrated Site Planning and is attached in Appendix 8.

Counts of flowering *P. junonis* plants were undertaken on 24 October 2023 at the Somersby Mintbush subpopulation locations adjacent to the quarry allotment identified by NSW NPWS (2000). The results of the counts are provided in Table 6.

Table 6 – Somersby Mint Bush Cumulative Count Results

Sub-Population Number	Count Results 2015	2016	2017	2018	2019	2020	2021	2022	2023
3	0	2 flowering plants (several non-flowering juvenile regrowth plants observed)	18 flowering plants	42 flowering plants	29 flowering plants	46 flowering plants	41	43	36
4	0	No flowering plants. Several non-flowering juvenile plants observed	34 flowering plants	394 flowering plants	484 flowering plants	498 flowering plants (including outlier to the north)	472	485	462

The report concludes:

- A decrease in the sub-populations 3 and 4 of Somersby Mintbush was recorded compared to the previous monitoring period.
- A slight decrease in the Somersby Mintbush population recorded is likely a result of seasonal flowering occurrences at the time of survey.
- Suitable environmental controls should continue to be maintained for the Project.
- The measures to improve the survey and reporting for the Somersby Mintbush should be considered for implementation during the next plant survey period.

4.6. Landscape and Rehabilitation Monitoring

The review of the landscape and rehabilitation activities has been prepared by Integrated Site Planning and is included in Appendix 9. An initial Landscape and Rehabilitation Plan (LRMP) for the project was approved on 11 December

2015. Since the preparation of this LRMP, the Biodiversity Offset Areas and Landscape Buffer Areas for the project have been revised through an approved Modification Application (No 1).

A revised Landscape and Rehabilitation Management Plan (LRMP) (Conacher Consulting Version 2 - 2019) and a new Biodiversity Offset Management & Habitat Rehabilitation Plan (Conacher Consulting November 2019) have been approved to meet the current project approval and commitment requirements.

The following works have been completed in accordance with the Biodiversity Offset Strategy requirements for the project:

- Collection of initial baseline floristic monitoring data.
- Fencing of biodiversity offset area.
- Long term security of offset.
- Management of fauna nest boxes.

The Project is compliant with the requirements of the current Landscape and Rehabilitation Management Plan and Biodiversity Offset Management & Habitat Rehabilitation Plan prepared in compliance with the Conditions for the current Project Approval.

The progressive implementation of these plans is being undertaken as required.

4.7. Heritage

The fence was constructed around the Grants Road RE1 Aboriginal Site and the initial monitoring of the site was undertaken in 2015.

As per the inspection, post approval, undertaken by Insite Heritage Pty Ltd, in 2015 and 2020, the sandstone block wall, 8m perimeter fencing and signage have remained in-situ.

The monitoring of Howes Reserve undertaken in 2020 did not show any indication of impact from the quarrying activities at Grant Sands. The vertical crack on the southern side of the Howes Reserve rockshelf has not widened during the intervening period, which indicates that vibration has not caused any impact to the Reserve.

The next Heritage assessment is scheduled for 2025.

There have been no complaints regarding cultural heritage in this period.

4.8. Community Consultation

The Community Consultative Committee met on 11 July 2023. The Minutes of Meeting are attached in Appendix 10.

There was one anonymous complaint received via the chair alleging increased frequency of rock hammering being conducted at the quarry. This was forwarded through to Grants Road Sand for investigation/advice. A response was provided to the chair advising that hammering has not moved closer or changed. Block production has remained the same for the last 4 years. Further, that annual sound monitoring for the quarry operations has always been within the criteria outlined in the EPA licence and DPE conditions of consent. The complainant was offered an “olive branch” to contact the company directly with any concerns. The chair forwarded this information through to the complainant; however, no further contact has been forthcoming. Accordingly, this complaint was closed off.

There were no other issues raised by members.

4.9. Visual

An earth and sound mound have been constructed in the north eastern area of the quarry site by Grants Road Sand Quarry. This mound has been vegetated using existing grasses located on the site to minimise visual impact. This vegetation is to be continuously maintained.

Mounds have been constructed on the western boundary of the quarry site. These mounds are vegetated with grasses to minimise visual impact.

4.10. Waste Management

All waste generated is managed appropriately and no on-site disposal of general waste occurs. Grants Road Sand Quarry is also committed to reducing, reusing and recycling prior to disposal of waste.

The quarry site is permitted to accept VENM and ENM. The quarry did not receive VENM or ENM from January to December 2023.

4.11. Bushfire

Bushfire management of the quarry site is implemented by the Quarry Manager including maintaining the site and the onsite water cart is set up for firefighting purposes and also able to provide onsite water for fire brigade tankers. The Quarry Manager is also an active member of the Somersby Rural Fire Service.

4.12. Product Transport

Haulage trucks access the site from Grants Road and use the internal haulage routes. All trucks exit using the truck tyre wash before accessing Grants Road. Transport movements are identified on the Grants Road website and attached in Appendix 11.

5. 2024 Reporting Period

The following identifies the measures and activities that are proposed to be undertaken during the 2024 calendar year.

General

- Maintaining equipment and implementing improvements to machinery to reduce any impacts.
- Research and applying best practice in quarry management.
- Updating of the website to include additional environmental reporting and relevant data from the quarrying activities.

Water Quality

- Retain sampling and water quality testing in groundwater monitoring site DDH1 (G4).
- Retain sampling and water quality testing in surface water monitoring sites W1 and W4.
- Replace destroyed groundwater monitoring bore DDH2 with a new groundwater monitoring site.
- Install a new water level sensor and recorder with telemetry functionality in the new groundwater monitoring bore subject to state government approval. The details are:
  - Ontoto Astro IP68 satellite groundwater data logger
  - Holykell HPT604 Absolute Level Sensor with pressure range 0-20m
- Make repairs to Control Monitoring Bore G3 and reconfigure the installed Ontoto Astro IP68 satellite groundwater data logger or replace the sensor/logger.
- Continue acquisition and charting of water level measurements in the existing groundwater monitoring bore DDH1, reconfigure Monitoring Bore G3 and commence data acquisition from the new monitoring bore, when installed.
- Carry out regular routine surface water and groundwater monitoring in the monitoring network during 2024 in accordance with NSWEPA License 11240 and the requirements documented in the surface water and groundwater management plans. This includes maintenance and make repairs to pressure sensors to maintain integrity and communications.
- Continue oil & grease testing at surface water sample site S1 (when flowing) at the frequency of one sample per month when discharge occurs.
- Submit water samples to the project laboratory (ALS) for analysis, compile results and assess any trends and exceedances and, if required, implement a response and action plan in accordance with the environmental management plans.
- Prepare a report giving the results of the 2024 monitoring program and an assessment of any trends and potential impacts. This will include an ongoing assessment of hydrographs, pH, TSS, TDS, nitrogenous compounds and other tests as required.

Noise Quality

- Implement best management practice to minimise the construction, operational and road noise of the project.
- Assess the noise monitoring data and relocate, modify or stop operations on site to ensure compliance.
- Maintain the effectiveness of noise suppression equipment on plant and equipment on site.
- Minimise the noise impacts of the project during certain meteorological conditions.
- Continuation of the of the earth mounding/bunding on the southern site boundary.
- Additionally, and dependent on product demand, it is expected that the depths of the working platforms (Areas A,B and C) will vary between 15-31 metres for Areas A and B and ripping sandstone in Area F.

Air Quality

- Review and update of the Air Quality Management Plan and submit to the Department of Planning and Environment for approval.
- Monitoring for air quality to be conducted in accordance with the NSW Environmental Protection Agency.
- Quarterly monitoring for crystalline silica.
- Investigation of faulty AWS and rectify. Monitoring of AWS throughout the year.
- Monitoring HVAS sampler.
- Preparation of the Annual report.

Biodiversity

Groundwater Dependent Ecosystem

- Detailed monitoring and reporting of the Groundwater dependent ecosystems.
- The 2024 GDE Monitoring Report is to include a review of the current GDE monitoring process to determine if any improvements in monitoring and recording procedures can be implemented to improve reporting outcomes for the project.
- The 2024 GDE Monitoring Report is to include a review of the current classification and plant community description and names according to the NSW Vegetation Classification System and Integrated Bionet Vegetation Data Program.

Somersby Mintbush

- Further counts of the previously identified locations of *P. junonis*.
- Continuation of suitable erosion and sedimentation controls and maintenance.
- Preparation of the Annual report.

Landscape and Rehabilitation

- A revision to the current format of the monitoring reports for the Landscape and Rehabilitation Management Plan and Biodiversity Offset Management Plan documents would provide a monitoring report format more suitably aligned to the approval conditions 19 – 29 of Schedule 3. This would provide for a separate report to address the Biodiversity and the Landscape categories as individual reports.
- An evaluation of the development stages of the resource extraction, requirements for disturbed area revegetation, landscape rehabilitation and the Conservation and Rehabilitation Bond (Condition 29) should be undertaken during the 2024 monitoring period.
- Additional ongoing maintenance/replacement of the fauna nest boxes is to be undertaken during the 2024 monitoring period.
- The 2024 Annual Report is to provide an analysis of the revegetation and weed management works undertaken as identified in the BOMHRP and LRMP.

Heritage

- Consultation with the Aboriginal Land Councils through the preparation of newsletters updating on activities of the Quarry.
- Inspection of biodiversity area subject to any works being undertaken.

Community Consultation

- Undertake community consultative committee meetings annually scheduled to be held in July 2024.

Waste Management and Minimisation

- Ensuring best practice is implemented throughout the quarry site.

Visual Impact

- Maintain the vegetation on all constructed mounds.
- Maintaining and improving the site where appropriate.

Bushfire Management

- Ensuring bushfire management practices are implemented.

Product Transport

- Monitor and record truck movements.

6. Community + Complaints

6.1. Complaint Management

There was one anonymous complaint received via the chair of the Consultative Committee alleging increased frequency of rock hammering being conducted at the quarry. This was forwarded through to Grants Road Sand for investigation/advice. A response was provided to the chair advising that hammering has not moved closer or changed. Block production has remained the same for the last 4 years. Further that annual sound monitoring for the quarry operations has always been within the criteria outlined in the EPA licence and DPE conditions of consent. The complainant was offered an “olive branch” to contact the company directly with any concerns. The chair forwarded this information through to the complainant; however, no further contact has been forthcoming. Accordingly, this complaint was closed off by the Consultative Committee.

Grants Road Sand will continue to undertake noise monitoring, and continue onsite inspections of plant and equipment to ensure noise mitigations are operational and effective in accordance with its Project Approval.

7. Trends

7.1. Trends in the monitoring data

Trends in monitoring data identified to date for the quarry expansion are outlined in the following table:

Table 8 – Trends in Monitoring Data

<table>
<tr><th>Key Issue</th><th colspan="2">Trends</th></tr>
<tr><td>Water Quality</td><td colspan="2">• Monitoring Site S1 on the south-western boundary of the Site (drainage) was noted to be dry during all attempts to collect samples in 2023.
• The pH of the surface water (W1 and W4) is slightly acidic to near neutral (6.35 to 6.91) which is consistent with measurements from previous monitoring rounds.
• The pH of groundwater (G3 and G4 (DDH1)) is slightly to moderately acidic (4.10 to 6.53), which is consistent with measurements from previous monitoring rounds.
• The concentrations of Total Suspended Solids (TSS) recorded in the two surface water monitoring sites (W1 and W2) ranges from 8 to 34 mg/L.
• The concentrations of Total Suspended Solids (TSS) recorded in the two groundwater monitoring bores (G3 and DDH1) were all less than the LOR.
• The concentrations of Total Dissolved Solids (TDS) recorded in the two surface water monitoring sites W1 and W4 were between 63 and 106 mg/L for the 2023 reporting period. These levels indicate low salinity and are, on average slightly higher than past results.
• Levels of TDS between 74 and 129 mg/L were recorded in groundwater monitoring bores G3 and DDH1 for the 2022 reporting period. These levels also indicate low salinity and are consistent with past test results.
• The concentrations of Nitrate plus Nitrite in the two surface water monitoring sites collected in 2023 were either less than the LOR or at very low levels. Two exceptions are a low level of 1.81 mg/L recorded in W1 and W4 in July 2023. The levels of Nitrate plus Nitrite recorded in groundwater monitoring bores G4 and DDH1 are between 4.92 and 5.75 mg/L over the five sampling campaigns in 2023. These concentrations are similar to those recorded in past monitoring campaigns. Relative soluble nitrate in in Mangrove Mountain aquifers is likely associated with 120-years of agricultural pursuits in the district.
• The concentrations of Total Kjeldahl Nitrogen (TKN) were between 0.4 and 2.0 mg/L in the surface water monitoring sites W1 and W4 to between 0.4 and 1.0 mg/L in the two groundwater monitoring sites G3 and DDH1. These levels and their ranges are similar to those recorded in past monitoring campaigns.
• Levels of Total Phosphorus were recorded at between 0.06 and 0.17 mg/L in the two surface water monitoring sites W1 and W4 and between less than the LOR to 0.05 mg/L in groundwater monitoring bores G3 and DDH1. These levels and their ranges are similar to those recorded in past monitoring campaigns. Phosphorus is likely associated with the agricultural history of the area.
• No potential significant impacts from current approved quarrying activities on this sandstone-hosted aquifer system were detected. It is noted however that concentrations of TDS in surface water samples are slightly higher than concentrations recorded in past sampling campaigns. The level however still indicates low salinity.</td></tr>
<tr><td rowspan="4">Noise</td><td colspan="2">Noise contributions have remained steady as follows:</td></tr>
<tr><td>Summary monitoring results previous period (2022 review)</td><td>Summary monitoring results this reporting period (2023 review)</td></tr>
<tr><td>Location 1: <35dBA</td><td>Location 1: <35dBA</td></tr>
<tr><td>Location 2: <35dBA</td><td>Location 2: <36dBA</td></tr>
<tr><td>Air Quality</td><td colspan="2">Location 3: <40dBA</td><td>Location 3: <35dBA</td></tr>
<tr><td>Air Quality</td><td colspan="2">It can be seen that PM10 concentrations were increasing from 2017 to 2019 before reducing in 2020 and 2021. The increase in concentrations from 2017 to 2019 and reduction in 2020 is seen across NSW. The highest concentrations in 2019, including</td></tr>
</table>

Key Issue	Trends
	the exceedance day experienced in December 2019, were due to drought and bushfire conditions across the region and is explained in the 2019 Annual Report. Annual dust deposition levels at R1 and R4 measured in 2023 are the lowest measured over the past seven years.
Biodiversity	A slight decrease in the total number of plants was recorded at both subpopulations of Somersby Mintbush compared to the previous monitoring data. The decreased numbers of flowering plants detected at both sub-populations is likely to be a result of the seasonal flowering variation and counting methods. Additionally individual plants may have spread in area of coverage, merging into a nearby plant. This would result in plants previously recorded as two plants now being recorded as one plant. Vigorous regrowth of the shrub cover for sub-population 3 has been observed over the last few monitoring events and it is expected that shading of *P. junonis* by a dense shrub cover may eventually cause the population numbers to decline. Continuing regrowth of *P. junonis* was observed at subpopulation 4. The tall shrub cover at sub-population 4 has died back since the hazard reduction burn and the levels of tall shrub regrowth at this location are not as vigorous as sub-population 3.
Heritage	There has been no impact on the rock engravings on site and within the adjoining Howes Reserve.

7.2. Comparison between the predicted and actual impacts of the project

Comparison data where available to the predicted and actual impacts of the project are outlined in the following table:

Table 9 – Comparison to the environmental assessment predictions

Key Issue	Comments
Water Quality	No exceedances or impacts from quarrying activities on the aquifer system were detected.
Noise	Noise exceedances were predicted, however the exceedances could be alleviated through the effective implementation of a number of mitigation measures. There has been no noise exceedance in this reporting period.
Air Quality	The cumulative results predicted in the assessment indicate that the 24-hour PM_{10} ground level concentrations at the current location of the HVAS would be in the order of 70 µg/m3. The highest measured cumulative 24-hour PM_{10} concentration was 28 µg/m3 in 2023, a value considerably lower than the conservative predictions made in the air quality assessment (less than 50% of the predicted concentration). Data capture for 2023 was 93%, a significant improvement compared to the 16% for 2022. The cumulative results predicted in the assessment indicate that the annual dust deposition level at the locations of the deposition gauges would be in the order of 1.7 g/m^2/month at R1 and 1.9 g/m^2/month at R4. The measured annual average dust deposition rates are 0.3 g/m^2/month at R1 and 0.2 g/m^2/month at R4. This is considerably lower than the conservative predictions made in the air quality assessment. Given the results of the data during the monitoring period, currently no additional action is required to control environmental performance. Rather, it is recommended that current mitigation processes are sustained.
Biodiversity	Impact on the Somersby Mintbush population and GDE populations. However, generally populations have remained the same or increased in size over the reporting periods.
Heritage	Possible impacts on the rock engravings on the site and within Howes Reserve. There has been no impact on the rock engravings on site and within the adjoining Howes Reserve.
Visual Impact	Visual impact proposed by the quarry extension is considered to be low given its location. However, the site is to be maintained and all stockpiles and acoustic mounds are to be vegetated once established. Visual impact is still low given its isolated location and the surrounding vegetation.
Product Transport	Transport numbers have grown due to the extent of quarrying and product extracted.

8. Independent Environmental Audit

8.1. Audit Non-compliances

Independent Environmental Audits have been carried out for the quarry extension. The following outlines the non-compliances and the actions undertaken or to be undertaken to address the non-compliance. All items from the 2018 Independent report have now been closed.

Schedule	Condition No.	Audit Findings	Action required by Auditor	Timing	Closed /Open
2021 Independent Environmental Audit					
3	4c(iii) dot point 6	Soil and Water - Water Quality	Update GWMP to include an investigation of opportunities to maintain ecosystem function in high priority GDEs to the west and northwest of the project through facilitating run-on of clean surface waters.	The GWMP will be updated to incorporate these recommendations and also address the non-compliances as outlined below. The revised GWMP will be completed by 30 April 2022, reviewed and then submitted to the Department of Planning by 30 May 2022. Documentation was provided to the Department of Planning addressing these issues in May 2022. The GWMP is now to be updated with this information and submitted to the Department of Planning.	Open
3	4c(IV)	Soil and Water - Water Quality	Update GWMP to include a Surface and Ground Water Contingency Strategy	As identified above.	Open
3	11c and 12b dot point 3	Air Quality	Update AQMP to include protocols for adverse meteorological conditions and extraordinary events.	The AQMP will be updated to incorporate the recommendation and also address the non-compliances as outlined below. The revised AQMP will be completed by 30 April 2022, reviewed and then submitted to the Department of Planning by 30 May 2022 Documentation was provided to the Department of Planning including such protocols in May 2022. The updated AQMP was submitted to the Department of Planning on 3 April 2023.	Closed
3	11f	Air Quality	Report missing sampling events in EPL Annual Return.	The Air Quality Annual report reports the missing sampling events.	Closed
3	29, 29a, 29b and 29c	Landscape	Review of Conservation and Rehabilitation Bond is required prior to April 30, 2022.	Conservation and Rehabilitation Bond report reviewed, revised and submitted to the Department of Planning and Environment.	Closed

Schedule	Condition No.	Audit Findings	Action required by Auditor	Timing	Closed /Open
5	4c	Environmental Management	The auditee should discuss its EPL conditions with the appointed NSW EPA office to better understand the reporting requirements.	Grants Road Sand Quarry has liaised with the EPA office as part of its submission of its annual report as part of its licence.	Closed
5	5 and 5c	Environmental Management	Reviews of the GWMP and AQMP are required to address the non-compliances of the previous audit and this audit.	AQMP has been completed. GWMP to be completed.	Open
Commit-ments		Groundwater	Send Annual Water Quality Monitoring Report to the Senior Hydrogeologist NOW for review.	The Annual Water Quality monitoring report will be sent to NOW as per the Statement of Commitments to commence as part of the 2021 Annual Report. Report submitted to NOW on 21 March 2021.	Closed
Commit-ments		Air Quality	The results indicate that the respirable crystalline silica concentration was lower than SafeWork NSW workplace exposure standards. Monitoring was not repeated quarterly in the first year of the quarry expansion. A campaign with 4 events, 3 months a part is required.	Air quality annual reporting for 2023 incorporated 3 events. Four events to be incorporated in the 2024 monitoring review.	Open
2018 Independent Environmental Audit					
	13a	Operation of Plant and Equipment - Documentation of plant maintenance is not complete	Maintenance logs to be maintained	Maintenance logs to be updated and reviewed as part of the 2018 Annual Report	Closed
	13b	Operation of Plant and Equipment - Plant and equipment regular maintenance registers not up to date	Maintenance logs to be maintained	Maintenance logs to be updated and reviewed as part of the 2018 Annual Report	Closed
3	11c	Air Quality - AQMP does not have protocols for adverse meteorological conditions and extraordinary events	Update AQMP to include protocol for adverse meteorological conditions and extraordinary events	Air Quality consultant to review and comment as part of the 2018 Annual review and prepare an Addendum if required.	Air Quality consultant determined Addendum not required as part of the Annual Review. POM now updated. Closed
3	11d	Air Quality - Systems are in place to monitor the servicing of vehicles however these were not up to date at the time of the site visit.	Maintenance logs to be maintained	Maintenance logs to be updated and reviewed as part of the 2018 Annual Report	Closed
3	11f	Air Quality - carry out regular air quality monitoring to determine whether the project is complying with the	HVAS sampling to comply with 6 day sampling period	The HVAS has been repaired. In 2023, of a possible 60 samples (over approximately 12 months), fifty-six (56) samples are	Closed

Schedule	Condition No.	Audit Findings	Action required by Auditor	Timing	Closed /Open
		relevant conditions of the approval		reported, resulting in a data recovery of approximately 93%. For reference, this data capture is below the recommended 95% but above the absolute minimum of 75% for data completeness for averaging purposes specified for reporting under the National Environment Protection Measure for Ambient Air Quality (Peer Review Committee, 2001).	
3	12b	Air Quality - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events	As per 11c	Noted as per 11c	Air Quality consultant noted that the non-compliance was due to the bushfires within the area. Closed
5	9	Independent Environmental Audit	Auditor notes that the lodgement by 30 June 2018 is non-compliant	An extension of time was requested for the independent environmental audit prior to 30 June 2018 by the Department of Planning. The Department of Planning provided an extension of time for the audit to 31 October 2018. Therefore, this is compliant	Closed
	3	Statutory Requirements - Comply with all conditional requirements in all approvals and licences	EPL requires updating	Grants Road Sand Quarry applied for a revised EPL in 2016. Various discussions have been held with EPA and a draft licence issued. Grants Road Sand Quarry has requested EPA for the final licence on several occasions. EPA has advised that the officer handling it has gone on extended leave and that they will action the revised licence asap. Grants Road to follow up again by the middle of November 2018 if not received.	EPA revised Licence issued. Closed
7		Groundwater - provide a complete set of results of the production and monitoring program including a review and assessment of the statistical analysis to NOW and the quarry owner	Analysis not reviewed by the NOW	To be undertaken as part of the 2018 Annual Review	Water Quality Annual Review provided to quarry owner. Annual review sent to NOW 21 March

Schedule	Condition No.	Audit Findings	Action required by Auditor	Timing	Closed /Open
					2021. Closed.
		Groundwater - parameters have not been recorded	Recording of parameters of monitoring samples	Parameters to be recorded for monitoring samples and included in the 2018 Annual Review.	Closed.
8		Surface Water - relocate the chicken farmer operations storage shed	Prior to the commencement of the quarry operations	Chicken farming operations have ceased and the chicken sheds have been cleaned.	Closed.
10		Noise - Plant and equipment to be maintained	Equipment maintenance logs have not been kept up to date.	Noted as per 13a	Closed.
11		Air Quality - carry out campaign monitoring for respirable crystalline silica	Carry out asap.	Air quality consultant to review as part of the 2108 Annual review	Closed.

Appendix 1
PROJECT APPROVAL 08_0099

Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister of Planning, I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the on-going environmental management of the project.

Chris Wilson
Executive Director
Development Assessment Systems & Approvals

Sydney 2014

Red text represents MOD 1 (Biodiversity Offset Area) - April 2018

SCHEDULE 1

Application Number:	08_0099
Proponent:	GR and AK Jones
Approval Authority:	Minister for Planning
Land:	Lot 1 and 2 DP358717
Project:	Grants Road Sand Quarry Extension

TABLE OF CONTENTS

DEFINITIONS

Annual Review	The review required by condition 3 of schedule 5
BCA	Building Code of Australia
Biodiversity Offset Strategy	The conservation and management of the Proponent's offset sites on Lot 1 and 2 DP358717, as shown in Appendix 3
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in Schedules 2 to 5 inclusive
Council	Central Coast Council
Department	Department of Planning and Environment
DoI Water	Department of Industry - Water
DRG	Division of Resources and Geoscience in the Department
EA	Environmental Assessment of the project titled *Grants Road Sand Quarry Extension - Environmental Assessment Report* prepared by Peter Andrews and Associates, dated April 2013; and the Proponent's response to the issues raised in submissions, dated December 2013
EA (MOD 1)	Environmental Assessment of the project titled *Section 75W Modification Application for Changes to Biodiversity Offset Area for Approved Grants Road Sand Quarry Extension 270 Grants Road Somersby,* dated December 2017 and supplementary ecological survey report titled *Additional Ecological Information Report*, dated March 2018
Environmental Consequences	The environmental consequences of quarrying operations, including erosion, sedimentation and adverse impacts on water quality, water quantity and biodiversity
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under the POEO Act
Feasible	Means what is possible and practicable in the circumstances
GDEs	Groundwater Dependent Ecosystems
High Priority GDEs	GDEs listed in Schedule 5 of the *Water Sharing Plan for the Kulnura Mangrove Mountain Groundwater Sources 2003*, including *Hawkesbury Coastal Banksia Woodland* and *Sandstone Hanging Swamps*
Incident	A set of circumstances that: • causes, or threatens to cause, material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this approval
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this approval, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Landscape buffer areas	The buffer areas as shown in Appendix 3
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning, or delegate
Minor	Not very large, important or serious
Mitigation	Activities associated with reducing the impacts of the project
Modification 1	The modifications to the project as described in EA (MOD 1)
Negligible	Small and unimportant, such as to be not worth considering
OEH	Office of Environment and Heritage
POEO Act	*Protection of the Environment Operations Act 1997*
Privately-owned land	Land that is not owned by a public agency or a mining or quarrying company (or its subsidiary)
Project	The project as described in the documents in condition 2 of Schedule 2, as well as quarrying operations and disturbance existing on the site as at 25 July 2014

Proponent	GR and AK Jones or any person who seeks to carry out the approved project under this approval
Public Infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications etc.
Quarrying operations	The extraction, processing and transportation of extractive materials on the site and the associated removal of vegetation, topsoil and overburden
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the project to a good condition and for the purpose of establishing a safe, stable and non-polluting environment
RMS	Roads and Maritime Services
Secretary	Planning Secretary under the EP&A Act or nominee
Site	The land described in Schedule 1
Statement of Commitments	The Proponent's commitments in Appendix 1
VENM	Virgin Excavated Natural Material and/or Excavated Natural Material

SCHEDULE 2
ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent, if prevention is not reasonable or feasible, minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.

TERMS OF APPROVAL

2. The Proponent must carry out the project generally in accordance with the:
   (a) EA;
   (b) EA (MOD 1); and
   (c) Statement of Commitments.

   Note: The Statement of Commitments is reproduced in Appendix 1.

2A. The Proponent must carry out the project in accordance with the conditions of this approval.

3. If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
   (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval;
   (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this approval; and
   (c) the implementation of any actions or measures contained in these documents.

LAPSING OF APPROVAL

5. If the project has not been physically commenced within 5 years of the date of this approval, then this project approval shall lapse.

LIMITS ON APPROVAL

Quarrying Operations

6. The Proponent may carry out quarrying operations on the site until 30 June 2044.

   Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all other respects other than the right to conduct extraction operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limit

7. The Proponent must not extract process and transport more than 250,000 tonnes of quarry products from the site in any calendar year.

SURRENDER OF EXISTING DEVELOPMENT CONSENT

8. By the end of December 2015, or as otherwise agreed by the Secretary, the Proponent must surrender all existing development consents that it holds for the site in accordance with Section 104A of the EP&A Act.

   Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrender of consent should not be

understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.

9. Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of that consent.

STRUCTURAL ADEQUACY

10. The Proponent must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- *Under Part 6 of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*

DEMOLITION

11. The Proponent must ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures,* or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

12. The Proponent must:
    (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
    (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Note: This condition does not apply to damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

13. The Proponent must ensure that all the plant and equipment used at the site, or used to monitor the performance of the project, is:
    (a) maintained in a proper and efficient condition; and
    (b) operated in a proper and efficient manner.

UPDATING AND STAGING OF STRATEGIES, PLANS OR PROGRAMS

14. To ensure that strategies, plans and programs required under this approval are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the project, the Proponent may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Proponent may also submit any strategy, plan or program required by this approval on a staged basis.

    With the agreement of the Secretary, the Proponent may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this approval.

Notes:

- *While any strategy, plan or program may be submitted on a staged basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the project to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.*
- *For the avoidance of doubt, existing approved management plans, strategies or monitoring programs for the Grants Road Sand Quarry will continue to apply until the approval of a similar plan, strategy or program under this approval (see condition 8 above).*
- *See also condition 5 of Schedule 5.*

PRODUCTION DATA

15. The Proponent must:
    (a) provide annual quarry production data to DRG using the standard form for that purpose; and
    (b) report this data in the Annual Review (see condition 4 of Schedule 5).

IDENTIFICATION OF APPROVED EXTRACTION LIMITS

16. By 30 September 2014, unless otherwise agreed with the Secretary, the Proponent must:
    (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the entire site; and
    (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.

17. While quarrying operations are being carried out, the Proponent must ensure that these boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.

COMPLIANCE

18. The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project.

SCHEDULE 3
ENVIRONMENTAL PERFORMANCE CONDITIONS

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project, including in respect of the extraction and/or interception of groundwater.

Water Supply

1. The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations under the approval to match its available water supply, to the satisfaction of the Secretary.

Compensatory Water Supply

2. The Proponent must provide a compensatory water supply to any owner of a privately-owned groundwater bore where monitoring indicates that the project is causing (or contributing to, in conjunction with another quarry project) a reduction in pumping yield of more than 10%, or a 2 metre decline in the water table, in consultation with DoI Water, and to the satisfaction of the Secretary.

   The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified.

   If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

   If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent must provide alternative compensation to the satisfaction of the Secretary.

Pollution of Waters

3. Unless an EPL authorises otherwise, the Proponent must comply with section 120 of the POEO Act during the carrying out of the project.

Water Management Plan

4. The Proponent must prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:
   - (a) be prepared by suitably qualified person(s), approved by the Secretary;
   - (b) be prepared in consultation with DoI Water, and be submitted to the Secretary for approval by the end of November 2014; and
   - (c) include a:
     - (i) Site Water Balance that includes:
       - details of:
         - sources and security of water supply;
         - water use and management on site;
         - any off-site water transfers;
         - reporting procedures; and
       - measures that would be implemented to minimise clean water use on site;
     - (ii) Surface Water Management Plan, that includes:
       - detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the project;
       - a detailed description of the water management system on site, including the:
         - clean water diversion system;
         - erosion and sediment controls;
         - dirty water management system; and
         - water storages;
       - a program to monitor and report on surface water flows and quality in water bodies that could potentially be affected by the project; and

- a comparison of monitoring results with modelled predictions;

(iii) Groundwater Management Plan, that includes:

- detailed baseline data on groundwater levels, yield and quality in local sandstone aquifers, privately-owned groundwater bores and in areas of high priority GDEs that could be affected by the project;
- groundwater impact assessment criteria for local sandstone aquifers, privately-owned bores and high priority GDEs;
- a program to monitor and report on:
  - groundwater inflows to the quarrying operations;
  - the impacts of the project on:
    - local sandstone aquifers;
    - privately-owned groundwater bores; and
    - high priority GDEs,

  including provision for continuous groundwater monitoring; and
- a program to validate the groundwater model for the project, and comparison of monitoring results with modelled predictions;
- a protocol, developed in consultation with Central Coast Sands Quarry, to appropriately apportion responsibility for any potential impacts to privately-owned groundwater bores and/or high priority GDEs that may be affected cumulatively by the project and operations at Central Coast Sands Quarry;
- an investigation of opportunities to maintain ecosystem function in high priority GDEs to the west and northwest of the project through facilitating run-on of clean surface waters; and

(iv) a Surface and Ground Water Contingency Strategy, that includes:

- a protocol for the investigation, notification and mitigation of identified exceedances of the surface water and groundwater impact assessment criteria;
- measures to mitigate and/or compensate potentially affected landowners of privately-owned land, including provision of alternative long-term supply of water to the affected landowner that is equivalent to the loss attributed to the project; and
- the procedures that would be followed if any unforeseen impacts are detected during the project.

Note: In the event that there is a dispute between the Proponent and Central Coast Sands Quarry concerning the development, finalisation or implementation of the above protocol, then either party may refer the matter to the Secretary for resolution. The decision of the Secretary on the matter shall be final.

NOISE

Hours of Operation

5. The Proponent must only conduct construction activities and quarrying operations on the site:
   (a) between 7.00 am and 6.00 pm, Monday to Friday;
   (b) between 7.00 am and 1.00 pm, Saturday; and
   (c) at no time on Sunday or public holidays.

   Note: The Proponent may carry out other activities e.g. maintenance, on the site provided that these activities are conducted in a manner that is inaudible at all privately-owned residences.

6. The following activities may be carried out on the site outside the hours specified in condition 5:
   (a) delivery or dispatch of materials as requested by Police or other authorities; and
   (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

   In such circumstances the Proponent must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

Noise Impact Assessment Criteria

7. The Proponent must ensure that the construction and operational noise generated by the project does not exceed the criteria in Table 1 at any residence on privately-owned land.

Table 1: Noise criteria

Receiver Location	***$L_{Aeq\ (15\ min)}$ dB(A)***
All privately-owned residences	40

Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*. Appendix 2 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria in Table 1 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of the agreement.

Operating Conditions

8. The Proponent must:
   (a) implement best management practice to minimise the construction, operational and road noise of the project;
   (b) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this approval;
   (c) maintain the effectiveness of noise suppression equipment on plant and equipment on site;
   (d) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this approval do not apply (see Appendix 2); and
   (e) carry out regular noise monitoring to determine whether the project is complying with the relevant conditions of this approval,

   to the satisfaction of the Secretary.

Noise Management Plan

9. The Proponent must prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
   (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval by the end of November 2014;
   (b) describe the measures that would be implemented to ensure:
      - compliance with the relevant conditions of this approval;
      - best management practice is being employed; and
      - the noise impacts of the project are minimised during meteorological conditions under which the noise criteria in this approval do not apply;
   (c) describe the proposed noise management system; and
   (d) include a monitoring program that:
      - uses attended monitoring to evaluate the compliance of the project against the noise criteria in this approval;
      - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
      - defines what constitutes a noise incident at the project, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

AIR QUALITY

Air Quality Impact Assessment Criteria

10. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 2, 3, 4 and 5 at any residence on privately-owned land.

Table 2: Long-term criteria for particulate matter

Pollutant	***Averaging Period***	***[d] Criterion***
Total suspended particulate (TSP) matter	Annual	[a] 90 µg/m^3

Particulate matter < 10 µm (PM_{10})	Annual	[a] 30 µg/m^3

Table 3: Short-term criteria for particulate matter

Pollutant	***Averaging Period***	***[d] Criterion***
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 50 µg/m^3

Table 4: Long-term criteria for deposited dust

Pollutant	***Averaging Period***	***Maximum increase in deposited dust level***	***Maximum total deposited dust level***
[c] Deposited dust	Annual	[b] 2 g/m^2/month	[a] 4 g/m^2/month

Table 5: Impact assessment criterion for crystalline silica

Pollutant	***Averaging Period***	***Criterion***
[e] Chronic Reference Exposure Level (REL) (PM_4)	Annual	3 µg/m^3

References to Tables 2 to 5:

[a] Total impact (ie. incremental increase in concentrations due to the project plus background concentrations due to all other sources);

[b] Incremental impact (ie. incremental increase in concentrations due to the project on its own);

[c] Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method;

[d] Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with the EPA; and

[e] Crystalline silica must be analysed in accordance with a test method approved by the Department of Health.

Operating Conditions

11. The Proponent must:
    (a) implement best practice management to minimise the dust emissions of the project;
    (b) regularly assess air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval;
    (c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 5);
    (d) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site; and
    (e) minimise the area of surface disturbance and maximise progressive rehabilitation of the site; and
    (f) carry out regular air quality monitoring to determine whether the project is complying with the relevant conditions of this approval,
    to the satisfaction of the Secretary.

Air Quality Management Plan

12. The Proponent must prepare and implement an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:
    (a) be prepared in consultation with the EPA and submitted to the Secretary for approval by the end of November 2014;
    (b) describe the measures that would be implemented to ensure:
        - compliance with the relevant conditions of this approval;
        - best practice management is being employed; and
        - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;
    (c) describe the proposed air quality management system; and
    (d) include an air quality monitoring program that:
        - is capable of evaluating the performance of the project;

- includes a protocol for determining any exceedances of the relevant conditions of approval;
- effectively supports the air quality management system; and
- evaluates and reports on the adequacy of the air quality management system.

METEOROLOGICAL MONITORING

13. For the life of the project, the Proponent must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

TRANSPORT

Monitoring of Product Transport

14. The Proponent must:
    (a) keep accurate records of the:
        - amount of quarry products transported from the site (per calendar month and year); and
        - number of laden vehicle movements from the site (per hour, day, week, calendar month and year); and
    (b) publish these records on its website biannually.

Operating Conditions

15. The Proponent must ensure that:
    (a) all project-related heavy vehicles enter and exit the site in a forward direction;
    (b) all laden vehicles entering or leaving the site have their loads covered; and
    (c) all laden vehicles leaving the site are cleaned of sand and other material that may fall on the road, before leaving the site.

Grants Road Maintenance

16. The Proponent must, in conjunction with the operator of the Central Coast Sands Quarry, cause to be prepared a road condition assessment and road maintenance contributions study of Grants Road. The study must:
    (a) be undertaken by a suitably qualified, experienced and independent person(s) endorsed by the Secretary;
    (b) be undertaken in consultation with Council;
    (c) be submitted to the Secretary for approval by the end of March 2015;
    (d) be co-funded by the Proponent and the operator of the Central Coast Sands Quarry on a basis which is proportionate to the maximum number of tonnes of quarry product expected to be dispatched from each quarry over the life of their major project approvals, and the length of Grants Road affected by laden vehicles from each quarry;
    (e) assess current road condition of the length of Grants Road affected by laden vehicles from each quarry, and future road maintenance requirements for this length of road over the life of the major project approvals for both quarries;
    (f) give consideration to the usage of Grants Road by laden vehicles from each quarry over the past five years and the predicted usage of Grants Road by laden vehicles from each quarry over the life of their major project approvals, including any importation of VENM; and
    (g) recommend per tonne/per kilometre road maintenance contributions for the project for the haulage of quarry products and VENM on Grants Road.

    If the Proponent and the operator of the Central Coast Sands Quarry cannot agree on any aspect of undertaking this study or the implementation of its recommendations, then either party may refer the matter to the Secretary for resolution. The decision of the Secretary on the matter shall be final.

17. The Proponent must pay contributions to Council for the maintenance of Grants Road, in accordance with the study required under condition 16, unless otherwise agreed by the Secretary.

Traffic Management Plan

18. The Proponent must prepare and implement a Traffic Management Plan for the project, to the satisfaction of the Secretary. This plan must:
    (a) be submitted to the Secretary for approval by the end of November 2014;
    (b) include a drivers' code of conduct to minimise the impacts of project-related trucks on local residences and road users; and
    (c) describe the measures that would be put in place to ensure compliance with the drivers' code of conduct.

BIODIVERSITY

Biodiversity Performance Measures

19. The Proponent must ensure that the project does not cause any exceedances of the performance measures in Table 6, to the satisfaction of the Secretary.

Table 6: Biodiversity impact performance measures

Feature	***Measure***
High priority GDEs located within 1 kilometre of extraction operations	Minor environmental consequences, including: • negligible erosion of the surface of the GDEs; • negligible sedimentation within the GDEs; • minor changes in the size of the GDEs; • no significant change to the composition or distribution of species within the GDEs.
Somersby Mintbush	Negligible environmental consequences

Offsets

20. If the Proponent exceeds the performance measures in Table 6 and the Secretary determines that:
    (a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
    (b) remediation measures implemented by the Proponent have failed to satisfactorily remediate the impact or environmental consequence;
    then the Proponent must provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Secretary.

    Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

Groundwater Dependent Ecosystem Monitoring and Management Program

21. The Proponent must undertake additional studies on the high priority GDEs located within 1 kilometre of extraction operations under the approval and potentially impacted by the project. The studies must be undertaken in consultation with DoI Water and include:
    (a) a description of the nature and extent of groundwater reliance for each GDE;
    (b) long-term monitoring of the condition of the GDEs;
    (c) performance indicators for project-related environmental consequences on GDEs and trigger levels to initiate mitigation/response measures; and
    (d) mitigation/response measures to ensure minor environmental consequences on the GDEs,
    to the satisfaction of the Secretary.

Somersby Mintbush Monitoring and Management Program

22. The Proponent must prepare and implement, in consultation with OEH and Council, a Somersby Mintbush (*Prostanthera junonis)* Monitoring Program within the vicinity of the site. This program must include:
    (a) a baseline assessment of the extent and condition of the Somersby Mintbush populations before commencement of quarrying operations under the approval;
    (b) long-term monitoring of these populations;
    (c) establishment of performance indicators for project-related environmental consequences on Somersby Mintbush and trigger levels to initiate mitigation/response measures; and

(d) mitigation/response measures to ensure negligible environmental consequences on the Somersby Mintbush,

to the satisfaction of the Secretary.

Biodiversity Offset Strategy

23. The Proponent must implement the Biodiversity Offset Strategy as described in the EA, EA (MOD 1) and Landscape and Rehabilitation Management Plan and as summarised in Table 7, and shown conceptually in Appendix 3, to the satisfaction of the Secretary.

Table 7: Summary of the Biodiversity Offset Strategy

Area	Offset Criteria	Size (hectares)
On-site Offset Area	Existing vegetation to be managed and maintained as: • Scribbly Gum Woodland and/or other native vegetation community commensurate with the local surroundings, including at least 4.44 ha in moderate to good condition; and • suitable habitat for threatened fauna species including the provision of at least 36 nest boxes in the biodiversity offset and landscape buffer areas.	7.0

Note: See Statement of Commitment No 9 for additional biodiversity offset requirements.

Long Term Security of Offset

24. Within 6 months of the determination of Modification 1, or as otherwise agreed by the Secretary, the Proponent must:

(a) engage an independent registered surveyor to survey and permanently mark the boundaries of the offset areas;

(b) submit a survey plan of these boundaries to the Secretary;

(c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff, the landowner and inspecting officers to clearly identify those boundaries; and

(d) cause restrictive and positive covenants under the *Conveyancing Act 1919* to be placed on the titles of the land referring to the surveyed offset areas, to ensure that the Proponent and the landowner:

- manage the offset areas for conservation in perpetuity;
- implement the Landscape and Rehabilitation Management Plan; and
- permit ongoing access to the offset areas by the Department and other relevant public authorities for the purposes of monitoring compliance with the covenants and Landscape and Rehabilitation Management Plan,

to the satisfaction of the Secretary.

LANDSCAPE

Rehabilitation Objectives

25. The Proponent must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy as described in the EA, EA (MOD 1) and Landscape and Rehabilitation Management Plan and comply with the objectives in Table 8.

Table 8: Rehabilitation objectives

Feature	***Objective***
Site (as a whole)	• Safe, stable and non-polluting. • Minimise the visual impact of the final landforms as far as is reasonable and feasible.
Surface Infrastructure	• To be decommissioned and removed, unless the Secretary agrees otherwise.
Quarry Benches	• Suitably landscaped and revegetated using native species.
Quarry Pit Floor	• Establish land with a level of at least Class 4 agricultural suitability over 80% of the quarry floor.
Community	• Ensure public safety. • Minimise the adverse socio-economic effects associated with quarry closure.

Progressive Rehabilitation

26. The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.

Landscape and Rehabilitation Management Plan

27. The Proponent must prepare and implement a Landscape and Rehabilitation Management Plan for the site, including the offset area, to the satisfaction of the Secretary. This plan must:
    (a) be prepared by suitably qualified person(s) whose appointment has been approved by the Secretary;
    (b) be prepared in consultation with OEH, DRG and Council, and submitted to the Secretary for approval by the end of July 2015;
    (c) describe how the implementation of the Biodiversity Offset Strategy and Statement of Commitment Number 9 would be integrated with the overall rehabilitation of the site;
    (d) describe the short, medium, and long term measures that would be implemented to:
        - manage the remnant vegetation and habitat on the site and in the offset areas;
        - implement the Biodiversity Offset Strategy;
        - manage the buffer areas surrounding the extraction area; and
        - ensure compliance with the rehabilitation objectives and the progressive rehabilitation obligations in this approval;
    (e) include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and the rehabilitation of the site, including triggers for any necessary remedial action;
    (f) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following initial preparation of the plan), including the procedures to be implemented for:
        - enhancing the quality of remnant vegetation and fauna habitat;
        - landscaping the site and along public roads to minimise visual and lighting impacts;
        - restoring native endemic vegetation and fauna habitat;
        - maximising the salvage of environmental resources within the approved disturbance area – including tree hollows, vegetative and soil resources – for beneficial reuse;
        - ensuring minimal environmental consequences for threatened species, populations and habitats;
        - minimising the impacts on native fauna, including undertaking pre-clearance surveys;
        - controlling weeds and feral pests;
        - controlling erosion;
        - controlling access; and
        - bushfire management;
    (g) include a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
    (h) identify the potential risks to the implementation of the Biodiversity Offset Strategy and

rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and

(i) include details of who would be responsible for monitoring, reviewing and implementing the plan.

Conservation and Rehabilitation Bond

28. The Proponent must lodge a Conservation and Rehabilitation Bond with the Department within 6 months of the approval of the Landscape and Rehabilitation Management Plan, to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Plan. The sum of the bond must be determined by:

(a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years;

(b) calculating the cost of rehabilitating disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and

(c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs,

to the satisfaction of the Secretary.

Notes:

- *Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEH as part of a Stewardship Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond.*
- *If capital and other expenditure required by the Landscape and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for the lodgement of a bond in respect of the remaining expenditure.*
- *If the rehabilitation of the site area is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.*

29. Within 3 months of each Independent Environmental Audit (see condition 9 of Schedule 5) or approval of each revised version of the Landscape and Rehabilitation Management Plan, the Proponent must review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must:

(a) consider the performance of the implementation of the rehabilitation of the site to date;

(b) consider the effects of inflation; and

(c) calculate the cost of rehabilitating the disturbed areas of the site (taking into account the likely surface disturbance over the next 3 years of quarrying operations.

HERITAGE

Heritage Management Plan

30. The Proponent must prepare and implement an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:

(a) be prepared by suitably qualified person(s) whose appointment has been approved by the Secretary;

(b) be prepared in consultation with OEH and local Aboriginal stakeholders;

(c) be submitted to the Secretary for approval by the end of November 2014;

(d) include a description of the measures that would be implemented for:

- protecting, monitoring and managing Aboriginal sites within the site, including the Biodiversity Offset Strategy;
- maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site and in the biodiversity offset areas;
- managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;
- ongoing consultation with the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the biodiversity offset areas;
- ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions; and

- the long term management of the Aboriginal cultural heritage values of the site post extraction operations and rehabilitation of the site.

VISUAL

30. The Proponent must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project to the satisfaction of the Secretary.

31. The Proponent must:
    (a) vegetate any earthen perimeter bund at the project within 3 months of establishing the bund, using appropriate flora species to minimise the visual and off-site sedimentation impacts of the project; and
    (b) maintain this vegetation in a good condition throughout the remainder of the project,
    to the satisfaction of the Secretary.

WASTE MANAGEMENT

32. The Proponent must:
    (a) minimise and monitor the waste generated by the project;
    (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of;
    (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
    (d) report on waste management and minimisation in the Annual Review,
    to the satisfaction of the Secretary.

33. Prior to importing any VENM to the site, the Proponent must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this approval to the Department.

DANGEROUS GOODS

34. The Proponent must ensure that the storage, handling, and transport of dangerous goods are done in accordance with the relevant *Australian Standards*, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

BUSHFIRE

35. The Proponent must:
    (a) ensure that the project is suitably equipped to respond to any fires on site; and
    (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

SCHEDULE 4
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing:
   (a) an exceedance of any relevant criteria in Schedule 3, the Proponent must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the project is again complying with the relevant criteria; and
   (b) an exceedance of any relevant air quality criteria in Schedule 3, the Proponent must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.

   If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent must:
   (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
      - consult with the landowner to determine his/her concerns;
      - conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and
      - if the project is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and
   (b) give the Secretary and landowner a copy of the independent review.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent must prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. The strategy must:
   (a) be submitted to the Secretary for approval by the end of November 2014;
   (b) provide the strategic framework for environmental management of the project;
   (c) identify the statutory approvals that apply to the project;
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
   (e) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
      - receive, record, handle, and respond to complaints;
      - resolve any disputes that may arise during the course of the project;
      - respond to any non-compliance;
      - respond to emergencies; and
   (f) include:
      - copies of any strategies, plans and programs approved under the conditions of this approval; and
      - a clear plan depicting all the monitoring to be carried out under the conditions of this approval.

Management Plan Requirements

2. The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
   (a) detailed baseline data;
   (b) a description of:
      - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
      - any relevant limits or performance measures/criteria;
      - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
   (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
   (d) a program to monitor and report on the:
      - impacts and environmental performance of the project;
      - effectiveness of any management measures (see c above);
   (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
   (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
   (g) a protocol for managing and reporting any:
      - incidents;
      - complaints;
      - non-compliances with statutory requirements; and
      - exceedances of the impact assessment criteria and/or performance criteria; and
   (h) a protocol for periodic review of the plan.

   Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Adaptive Management

3. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance

measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:

(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;
(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
(c) implement remediation measures as directed by the Secretazry,

to the satisfaction of the Secretary.

Annual Review

4. By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must review the environmental performance of the project to the satisfaction of the Secretary. This review must:
   (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
   (b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the:
      - relevant statutory requirements, limits or performance measures/criteria;
      - requirements of any plan or program required under this approval;
      - monitoring results of previous years; and
      - relevant predictions in the EA;
   (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;
   (d) identify any trends in the monitoring data over the life of the project;
   (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
   (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.

Revision of Strategies, Plans and Programs

5. Within 3 months of the submission of an:
   (a) annual review under condition 4 above;
   (b) incident report under condition 7 below;
   (c) audit report under condition 9 below; or
   (d) any modification to the conditions of this approval,

   the Proponent must review the suitability of all strategies, plans and programs required under this approval, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

   Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.

CONSULTATION

5A. Where the conditions of this approval require consultation with an identified party, the Proponent must:
   (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
   (b) provide details of the consultation undertaken, including:
      - the outcome of that consultation, matters resolved and unresolved; and
      - details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed any unresolved matters.

   However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this consent.

Community Consultative Committee

6. If directed by the Secretary, the Proponent must establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. Any such CCC must be operated in general accordance with the *Community Consultative Committee Guidelines: State Significant Projects (2016)*.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *In accordance with the Department's guideline, the CCC should be comprised of an independent chair and appropriate representation from the Proponent, Council (if available) and the local community.*
- *This CCC can be combined with any other CCC established under conditions of consent or approval for State Significant quarry developments on the Somersby Plateau.*

REPORTING

Incident Reporting

7. The Proponent must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

AUDITING

Independent Environmental Audit

9. By 30 June 2015 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
   (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
   (b) include consultation with the relevant agencies and the CCC;
   (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or necessary water licences for the project (including any assessment, strategy, plan or program required under these approvals);
   (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;
   (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and
   (f) be conducted and reported to the satisfaction of the Secretary.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within 3 months of commencing each audit, or within another timeframe agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Proponent must implement these recommendations, to the satisfaction of the Secretary.

ACCESS TO INFORMATION

11. By the end of November 2014, the Proponent must:
   (a) make copies of the following publicly available on its website:
      - the documents referred to in condition 2 of Schedule 2;
      - all current statutory approvals for the project;
      - all approved strategies, plans and programs required under the conditions of this approval;
      - a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;
      - a complaints register, updated monthly;

- the annual reviews of the project;
- any independent environmental audit, and the Proponent's response to the recommendations in any audit;
- minutes of CCC meetings;
- any other matter required by the Secretary; and

(b) keep this information up to date,

to the satisfaction of the Secretary.

APPENDIX 1
STATEMENT OF COMMITMENTS

Subject	Commitments	Timing
1. General Arrangements	The development must be carried out in accordance with the Environmental Assessment (April 2013) prepared by Peter Andrews + Associates Pty Ltd and this Addendum Report. This Addendum Report will override the Environmental Assessment where there is an inconsistency.	Ongoing
2. Staging	Staging of the development will be in accordance with the staging of works set out in the Environmental Assessment (April 2013).	Ongoing
3. Statutory Requirements	Obtain and maintain all relevant approvals and licences.	As required and continuous
	Comply with all conditional requirements in all approvals and licences.	As required
4. Hours of Operation	7.00am to 6.00pm Monday to Friday 7.00am to 1.00pm Saturday	Ongoing
5. Reporting Requirements	Undertake monitoring for the key areas as identified below.	As required
	Incorporate relevant data/monitoring information in the Annual Reports.	Annually
	Incorporate the management measures into the Environmental Management Plan. The development is to operate at all times within the terms and conditions of the Environmental Management Plan.	Prior to commencement and subject to five yearly reviews
	Update procedures manual for the operation of the quarry with regards to the quarry expansion including the following and ensure all staff are aware of procedures. • Operation of plant and equipment • Environmental monitoring • Restrictions imposed on quarrying • Vegetation removal • Sedimentation and erosion • Transportation	Prior to commencement of the operations
	Provision of the annual production data to the Department of Trade and Investment	Annually
6. Soils and Land capability	Locate areas for acoustic earth mounds.	Prior to topsoil stripping operations
	Maintain topsoil for rehabilitation and minimise soil loss through erosion.	Ongoing
	Vegetate all mounds with Kikuyu grass	As required
	Implement downslope sedimentation controls as required	Until the surface of the mounds are vegetated
7. Groundwater	Undertake automatic water level measurements in water level data logger in monitoring bores	Initially 4-hourly samples. Assess data after 12 months and depending on the results, decrease frequency to 8-hourly samples
	Undertake groundwater sampling in representative monitoring bores	Initially 3 monthly. Assess data after 12 months and depending on the results, decrease frequency to 6

Subject	Commitments	Timing
		monthly samples
	Undertake automatic rainfall measurements in tipping bucket rain gauge data logger on site	Continuous logging at every 0.2mm tip with time/date stamps.
	Preparation of the Groundwater Management Plan, which incorporates the development of a water level and water quality monitoring program and the development of a set of trigger levels and mitigation measures if adverse impacts occur on the environmental and/or neighbouring water users.	Within 6 months of the project approval
	Provide a complete set of results of the production and monitoring program including a review and assessment of the statistical analysis to the *Senior Hydrogeologist DoI Water* and the quarry owner.	Annually
	Communicate with any landowner if there is a scientifically and independently demonstrated significant impact on any neighbouring water users surrounding the site.	As required
8. Surface Water	Preparation of an Environmental Management Plan for the quarry extension based on a continuation of the current environmental management and mitigation measures for the quarry expansion as outlined in the current EMP.	Prior to the commencement of the quarry operations
	Construct earth bunds and surface water diversion banks and drains around the perimeter of the entire quarry pit void. Bunds and/or diversion drains will require ongoing minor realignments as the quarry pit develops and advances especially through zone 'C'. Bunds can be designed as 'multi-purpose' to provide additional public 'Highwall' safety in addition to surface water flow management.	Prior to the commencement of the quarry operations and ongoing
	Relocate the chicken farming operations storage shed that is currently located on the south west drainage path to the south of the site and bund the storage site to contain runoff while chicken farming is ongoing at the site.	Prior to the commencement of the quarry operations and ongoing
	Construct 'out of pit' containment infrastructure in the south-eastern most section of the property boundary adjacent to Zone E to capture and passively treat contaminated surface water runoff whilst simultaneously providing additional water security. Infrastructure to consist of: 1. One 10 Megalitres (ML) Pollution Control Dam (PC Dam) to receive nitrogen rich runoff from Zones F&G where the existing chicken and machinery sheds are located. This dam will gravity flow via a spillway into a shallow polishing pond. Control structures such as rock 'rip rap' or similar will be required to control water runoff velocity prior to entering the PC Dam. 2. Broad shallow polishing pond/s will receive any water spilled or transferred from PC Dam and provide passive treatment through suitable wetland plant species. 3. Pipeline and pumps for transfer of water each way between the in-pit decant pond and out of pit PC Dam. 4. A floating siphon in the PC Dam to maintain a 5 ML operating level. Ensure PC Dam and pond are located outside of the water pipeline easement and located generally as shown on the plans. Access to the ponds will be along the southern boundary across the water pipeline easement.	Prior to the commencement of the quarry operations and ongoing
	Continue monitoring of surface water at locations W1 and W4	Monitor until stage 2 of the quarry commences.

	After construction of the control pond and polishing pond, it is proposed that the quality of the treated quarry discharge released to the south west waterway is monitored at the future surface water quality monitoring location S1 shown in Appendix 2 of this report. Initially, the control pond and polishing dam will be used mainly to treat runoff from the chicken farming operations, the existing dwelling and a small area of pasture, and will only be used to treat water captured within the quarry during large rainfall events until the commencement of stage 2 of the quarry. As the quarry extends to the maximum quarry footprint in stage 2, pumping out of the quarry may occur as regularly as weekly. Undertake water quality monitoring by a grab sample taken during discharge downstream of the control pond and polishing pond at location S1 on a monthly basis. The parameters will be monitored and compared against the proposed discharge limits as follows: • Suspended solids 40mg/L • Oil and grease – 5 and/or none visible • pH – 6.0-8.0	Monthly water monitoring
9. Biodiversity and Environmental Management	Identify the boundaries of the quarry.	Prior to clearing of vegetation
	Preparation of a detailed Biodiversity Offset Management and Habitat Rehabilitation Plan for areas to be retained as biodiversity offsets within the site.	Prior to the clearing of vegetation
	Biodiversity offsetting will be undertaken to compensate for unavoidable impacts to biodiversity within the site including the removal of 1.5 hectares of Cleared Land with Remnant Trees vegetation and the loss of 18 hollow bearing trees. The areas within the site proposed for biodiversity offsetting are located in the north-eastern section of the site and along the western section of the site. The offsetting strategy proposed will result in the improvement and maintenance of biodiversity values on the site for the medium to long term. A total of 7 hectares of land will be retained and managed as a biodiversity offset to compensate for the loss of 1.5 hectares of Cleared Land with Remnant Trees vegetation. Offset areas will be protected in perpetuity and subject to a 10 year rehabilitation and maintenance period. The areas proposed for retention comprise the following: • Offset Area A. 1.05 hectares of Scribbly Gum Woodland in the east of Lot 1 DP358717; • Offset Area B. 1.51 hectares of Scribbly Gum Woodland in the west of Lot 1 DP358717; and • Offset Area C. 4.44 hectares of Red Bloodwood - Scribbly Gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion in the west of Lot 2 DP358717. The areas proposed for offsetting will be subject to protective fencing to exclude livestock (all areas) and local populations of feral deer (Areas A and B), replanting of endemic tree and shrub species within cleared areas and weed management of noxious and environmental weeds (Areas A and B). A total of 170 hollow-bearing trees will be retained and 36 nest boxes will be erected to compensate for the loss of 18 hollow bearing trees. Any shortfall in hollow-bearing trees will be supplemented by installing either salvaged hollow sections of trees at a ratio of one salvaged hollow section per hollow-bearing tree, or nest boxes at a ratio of two salvaged nest boxes per hollow-bearing tree.	The first 10 years of Stage 2

	All hollow-bearing trees to be removed are to be inspected and sectionally dismantled by an arborist, under the supervision and direction of an ecologist. Where possible, escaped fauna is to be caught by the consulting ecologist and transported to a suitable release area. If juvenile or injured fauna are encountered they are to be captured and transported to a wildlife carer or a veterinary surgeon as required. In the case where the arborist declares a tree or stag unsafe to climb, machine removal with a rotating grab or similar will be required.	Prior to removal of the hollow-bearing trees
10. Noise	Incorporate noise reducing measures (upgraded exhausts, enclosures/panels to engines, or localised plant specific shielding*) to achieve the following noise reductions: • Dozer 4db; • Trencor 3dB; • McCloskey 3dB; and • Sandwash Plant 8dB for air cooled 6 cylinder engine* (Smaller 4 cylinder engine is now operating with a purpose designed enclosure and exhaust resulting in an 8dB reduction and does not require further attenuation). All reversing alarms replaced with level varying or broadband "quacker" type alarms.	Prior to the use of the plant equipment.
	Plant and equipment to be maintained to ensure acoustic performance is not de-rated and complies with the recommended limits outlined in the Noise Impact Assessment (NIA) and incorporating the specified noise controls.	Throughout the life of the quarry.
	A Site Operational Management Plan (SOMP) be developed to ensure that the dozer, Trencor and McCloskey do not operate simultaneously.	Throughout the life of the quarry.
	Provision of an earth mounds 3-4 metres high along the southern and south-eastern quarry boundaries as shown on Figure 14 of the Environmental Assessment before commencing Precincts E, F and G.	Prior to quarrying of stage 2.
	The SOMP to document procedures to maximise site shielding and minimise number of plant and equipment on exposed locations, particularly on the eastern and southern portions of the quarry (areas B, C, F and G). That is, where practical and feasible only one (1) item of plant would operate at an exposed level (<8m below ground level) at any one time and extraction to proceed against a working face where practical.	During quarrying of the stage 2.
	A site weather station will be installed and continually monitor ambient weather conditions including wind speed and direction at a height of ten (10) metres above ground level. The current weather conditions would be utilised to manage day to day quarry operations, and the SOMP incorporate strict protocols including: • Cease operations within Precinct F and G during north-north-west or west wind conditions up to 3m/s with respect to the operation of the dozer, Trencor and McCloskey in exposed locations (<8m below ground level); and • Utilise periods of high winds >5m/s (particularly east and south-east winds) and/or rain with elevated background noise levels to extract material within exposed locations (Areas B, F and G).	During quarrying of the relevant precincts.

	A Complaints Management Procedure (CMP) be prepared to deal with any noise complaints as follows and include: • Site contact telephone number during business hours to lodge complaints or seek additional information (and message service for out of hours). If phone unattended it should divert to mobile phone of site quarry manager; • Log to record compliant including time of alleged noise issue, duration, description of noise, prevailing weather conditions and complainants contact details; • Complaints to be responded to in a timely manner. Where the noise is currently occurring, Quarry Manager must investigate and determine noise source is noise is likely to be exceeding Approval Noise Limits. If exceedance is occurring, operations to be amended or ceased; • Audits at sensitive receiver locations to identify noise contributions, compliance and determine if additional procedures or controls to minimise noise from the site are required; • A record of noise investigations to be maintained on site and complainants informed of outcomes of investigations and actions implemented following any noise complaints; and • All site plant including trucks to be regularly inspected and maintained to ensure that the equipment is operating in accordance with specifications and satisfied the noise limits referenced in the NIA (min Annually).	Prior to the commencement of the quarry extensions.
	Undertake an Annual Noise monitoring program that incorporates: • Site attended noise measurements at the three (3) reference locations and record aural observations, statistical noise levels (LA90, LAeq), weather conditions and quarry operations. Typically measurement considering of two (2) 15 minute measurement periods at each receiver; • Attended nearfield or midfield measurements to confirm operating noise levels and determine sound power levels of individual plant and equipment for comparison with source noise data utilised in the EIS Noise Impact Assessment; • Assessment of noise audit measurement results against Conditions of Consent and any pending Licence to determine compliance; • Provide recommendations for ameliorative or management measures for Quarry operator where noise exceedances are identified; • Preparation of Annual Noise Monitoring Report for submission to Consent Authority and/or EPA.	Annually
11. Air Quality	Preparation of an air quality management plan incorporating PM_{10} monitoring at the most affected off-site sensitive location.	Annually
	Minimise dust impacts at sensitive residences through the following onsite management procedures. These procedures to meet the KPIs outlined in this report and be reviewed. • Water of unsealed roads; • Use of wheel-wash and operation of sealed road from wheel-wash to the front gate; • Covering of loads during hauling; • Water of stockpiles when necessary; • Limiting vehicle speed onsite; and	Annually
	• Limiting the area of disturbed land and progressive rehabilitation of completed areas.	

	Carry out campaign monitoring for respirable crystalline silica. The monitoring would assess the exposure of quarry workers to respirable crystalline silica (in accordance with Australian Standard (AS 2985-2009) - Workplace atmospheres - Method for sampling and gravimetric determination of respirable dust.	First year of the quarry extension (on a day of maximum throughput). Monitoring to be repeated quarterly in the first year and if more than two consecutive results demonstrate low risk, monitoring would be discontinued.
	Incorporate greenhouse gas reduction measures for the operation of the project including: • Opportunities to increase energy efficiency will be continuously reviewed including opportunities to minimise haul distances for quarry material, ensuring trucks are fully loaded to maximise productivity and efficiency, reducing trips by coordinating delivery and removal of materials. • Consideration of the use of alternative fuels where economically and practically feasible. • Regular maintenance of diesel powered equipment to ensure operation at peak efficiency. • Consideration of energy efficiency for all electrical equipment, appliances, lighting and hot water system.	Throughout the life of the quarry
12. Roadworks and Traffic Management	All vehicles leaving the site with loads of extracted material are to be sufficiently covered to prevent windblown dust.	Ongoing
13. Heritage	Grants Rd RE1 and RE2 sites are to be preserved.	Continuous
	Incorporate a ten (10) metre buffer on the southern, eastern and western boundary of the anthropomorphic figure (Grants Rd RE1).	For the life of the quarry
	The bund wall for the quarry extension in the area of Grants Rd RE1 to be constructed of block wall rather than earth in between the engraving and the boundary.	Prior to the quarrying of Precinct C
	The engraving (Grants Rd RE1) is incorporated into the monitoring programme currently in place for the adjacent Howes Aboriginal Reserve.	Five yearly
	A protective fence is constructed 8 metres around each side of the Grants Rd RE 1 site to prevent inadvertent damage. The fence should incorporate appropriate signage to ensure the access within the fenced zone is limited to maintenance activities such as grass cutting.	Prior to the quarrying of Precinct C
	Traffic is to be directed around the small mundoe at the Grants Rd RE 2 site to ensure minimal disturbance.	Continuous
	An additional monitoring site visit be undertaken to review the recommendations effectiveness to protect the site.	12 months after the project approval
	The quarry operator to develop and implement an Aboriginal Cultural Heritage Induction Program for all personnel associated with the quarry operations. A register is to be kept off staff/contractors that have been inducted.	Prior to the commencement of the quarry extensions
	Should any materials suspected of being of Aboriginal occupation origin be located during the quarry operations that work cease in that location immediately and that the Office of Environment & Heritage be contacted immediately.	For the life of the quarry
14. Visual Impact	Vegetate all stockpiles and the acoustic earth mounds using appropriate species noting that the current conditions of consent requires the use of Kikuyu grass for the stabilisation of stockpiles.	For the life of the quarry
	Maintain grass covered mounds.	For the life of the quarry
	Maintain the site.	For the life of the quarry
	Keep the site clean and tidy where possible.	Continuous

	Progressively revegetate all areas where quarrying is completed.	Upon completion of quarrying in a precinct
15. Bushfire Protection	Provision of an on-site mobile water pump and tank, with firefighting hose connections to be located on site.	For the life of the quarry
	Management of the site to provide a defendable space to the bushfire hazard. These areas are to be regularly inspected and maintained by the landowners.	For the life of the quarry
16. Waste Management	Keep the site clean and tidy where possible	For the life of the quarry
	Ensure all general waste / garbage is removed by a licensed waste collection contractor at least on a weekly basis.	Continuous
	Preparation of a waste management plan for the demolition of any structures.	Prior to demolition.
17. Mine Rehabilitation	Ensure completed areas of the quarry are revegetated to reduce sedimentation and erosion and dust emissions and visual impact.	As required
	Preparation of a quarry rehabilitation plan to identify staging for rehabilitation.	Within five years of commencement of the quarry extension
	A detailed decommissioning plan will be prepared as part of the review of the Environmental Management Plan.	Towards the end of the life of the Quarry (two years prior)
	A five year monitoring program to be implemented upon completion of the rehabilitation.	Five years after the rehabilitation.

APPENDIX 2
NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 is to apply under all meteorological conditions except the following:
   a) during periods of rain or hail; or
   b) wind speeds greater than 3 m/s measured at 10 m above ground level.

Determination of Meteorological Conditions

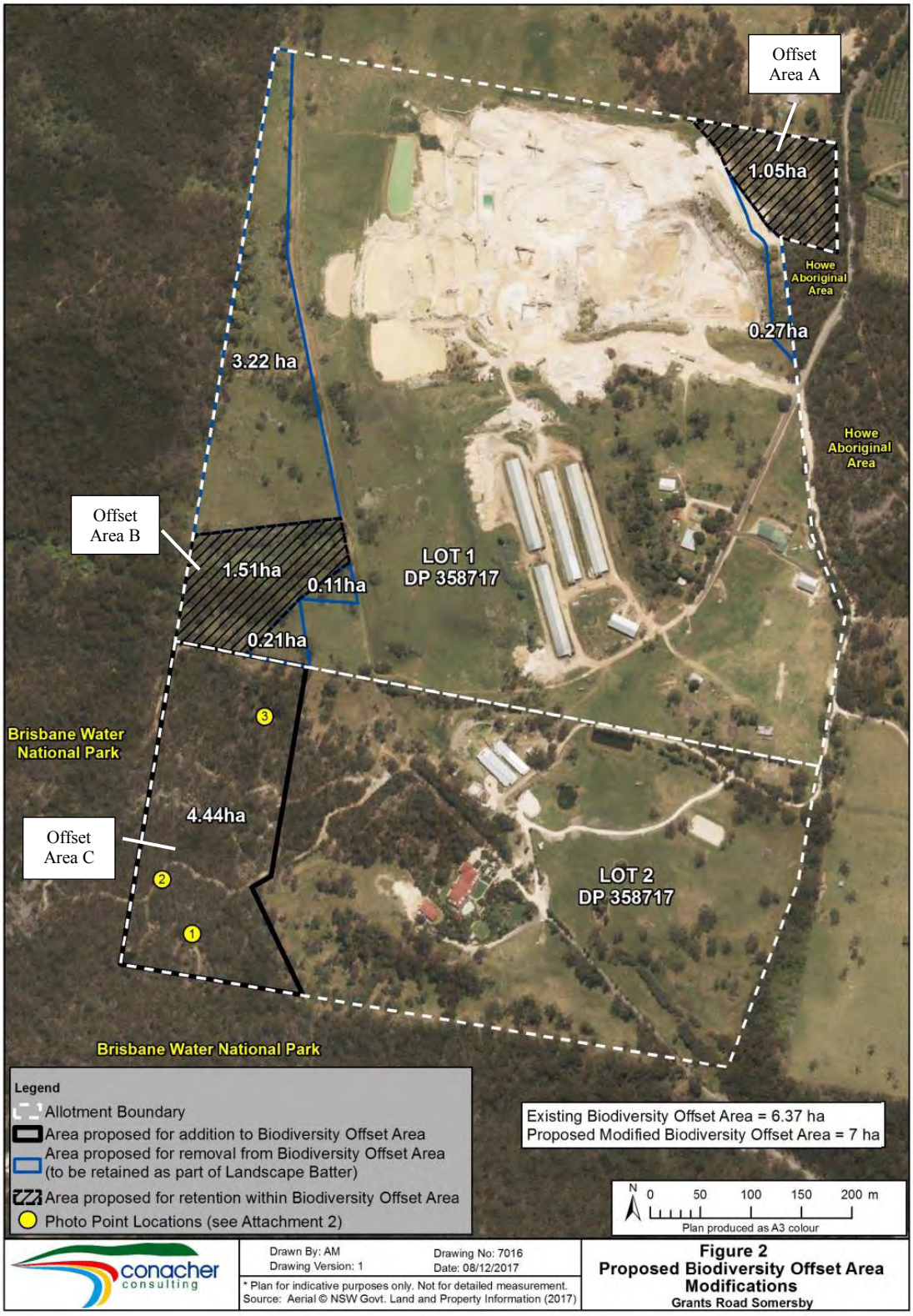
2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station in the vicinity of the site.

Compliance Monitoring

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.

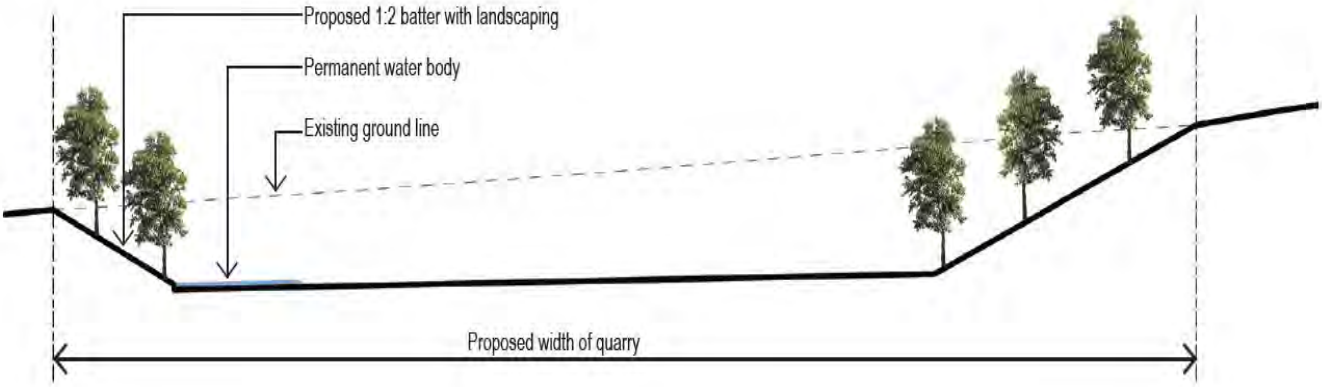
4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
   a) monitoring locations for the collection of representative noise data;
   b) meteorological conditions during which the collection of noise data is not appropriate;
   c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
   d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

APPENDIX 3
BIODIVERSITY OFFSET AND LANDSCAPE BUFFER AREAS




Legend
Subject Site Boundary
Landscape Buffer Area
N
0
50
100
150
200 m
Plan produced as A3 colour
conacher consulting
Drawn By: AM
Drawing Version: 1
Drawing No: 8013
Date: 08/12/2017
* Plan for indicative purposes only. Not for detailed measurement.
Source: Aerial © Nearmap (2018) Air Photo Date: 08/08/2017
Landscape Buffer Areas
Grants Road, Somersby

APPENDIX 4
CONCEPTUAL FINAL LANDFORM



Appendix 2
NOTICE OF MODIFICATION

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the project approval referred to in Schedule 1, as set out in Schedule 2.

Howard Reed

Howard Reed
Director
Resource Assessments

Sydney 04 May 2018

SCHEDULE 1

Project approval 08_0099 for the Grants Road Sand Quarry, granted by the Executive Director Development Assessment Systems & Approvals, as delegate of the Minister for Planning, on 25 July 2014.

SCHEDULE 2

1. In Schedule 1, replace "Lot 1 DP358717" with "Lot 1 and 2 DP358717".

2. In the list of definitions, delete the terms "Biodiversity Offset Strategy", "Council", "DRE", "NOW", "Project" and "Secretary", and their definitions, and insert the following terms and definitions in alphabetical order:

Biodiversity Offset Strategy	The conservation and management of the Proponent's offset sites on Lot 1 and 2 DP358717, as shown in Appendix 3
Council	Central Coast Council
DoI Water	Department of Industry - Water
DRG	Division of Resources and Geoscience in the Department
EA (MOD 1)	Environmental Assessment of the project titled *Section 75W Modification Application for Changes to Biodiversity Offset Area for Approved Grants Road Sand Quarry Extension 270 Grants Road Somersby,* dated December 2017 and supplementary ecological survey report titled *Additional Ecological Information Report*, dated March 2018
Feasible	Means what is possible and practicable in the circumstances
Landscape buffer areas	The buffer areas as shown in Appendix 3
Modification 1	The modifications to the project as described in EA (MOD 1)
Project	The project as described in the documents in condition 2 of Schedule 2, as well as quarrying operations and disturbance existing on the site as at 25 July 2014
Secretary	Planning Secretary under the EP&A Act or nominee

3. Delete all references to "shall" and replace with "must", except in conditions 3, 5 and 9 of Schedule 2, the note to condition 4 of Schedule 3 and the final sentence of condition 16 of Schedule 3.

4. Delete all references to "DRE" and replace with "DRG".

5. Delete all references to "NOW" and replace with "DoI Water".

6. Delete all references to "biodiversity offset strategy" and replace with "Biodiversity Offset Strategy".

7. In condition 1 of Schedule 2:
   (a) after the words "specific performance", insert the words "measures and"; and
   (b) delete the words "and/or minimise any" and replace with ", if prevention is not reasonable or feasible, minimise any material".

8. In condition 2 of Schedule 2, delete sub-paragraphs (b) and (c) and replace with:

   (b) EA (MOD 1); and
   (c) Statement of Commitments.

9. Following condition 2 of Schedule 2, insert the following:

   2A. The Proponent must carry out the project in accordance with the conditions of this approval.

10. In the Notes to condition 10 of Schedule 2, delete the term "4A" and replace with "6".

11. In condition 13 of Schedule 2, after the words "plant and equipment used at the site", insert the words ", or used to monitor the performance of the project,".

12. After condition 17 of Schedule 2, insert the following:

COMPLIANCE

18. The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project.

13. In condition 23 of Schedule 3:
(a) before the words "described in the EA", insert the word "as";
(b) after the term "EA, ", insert the words "EA (MOD 1) and Landscape and Rehabilitation Management Plan and";
(c) delete the words "and revised"; and
(d) delete Table 7, and its Note, and replace with the following:

Table 7: Summary of the Biodiversity Offset Strategy

Area	***Offset Criteria***	***Size (hectares)***
On-site Offset Area	Existing vegetation to be managed and maintained as: • Scribbly Gum Woodland and/or other native vegetation community commensurate with the local surroundings, including at least 4.44 ha in moderate to good condition; and • suitable habitat for threatened fauna species including the provision of at least 36 nest boxes in the biodiversity offset and landscape buffer areas.	7.0

Note: See Statement of Commitment No 9 for additional biodiversity offset requirements.

14. Delete condition 24 of Schedule 3 and replace with:

24. Within 6 months of the determination of Modification 1, or as otherwise agreed by the Secretary, the Proponent must:
   (a) engage an independent registered surveyor to survey and permanently mark the boundaries of the offset areas;
   (b) submit a survey plan of these boundaries to the Secretary;
   (c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff, the landowner and inspecting officers to clearly identify those boundaries; and
   (d) cause restrictive and positive covenants under the *Conveyancing Act 1919* to be placed on the titles of the land referring to the surveyed offset areas, to ensure that the Proponent and the landowner:
      - manage the offset areas for conservation in perpetuity;
      - implement the Landscape and Rehabilitation Management Plan; and
      - permit ongoing access to the offset areas by the Department and other relevant public authorities for the purposes of monitoring compliance with the covenants and Landscape and Rehabilitation Management Plan,

   to the satisfaction of the Secretary.

15. In condition 25 of Schedule 3:
(a) after the words "rehabilitation strategy", insert the words "as described"; and

(b) after the term "EA,", insert the words "EA (MOD 1) and Landscape and Rehabilitation Management Plan".

16. In condition 27 of Schedule 3:
(a) before the words "would be integrated" in sub-paragraph (c), insert the words "and Statement of Commitment Number 9";
(b) delete the word "and" at the end of the second bullet point in sub-paragraph (d); and
(c) delete the third bullet point in sub-paragraph (d) and insert the following:

- manage the buffer areas surrounding the extraction area; and
- ensure compliance with the rehabilitation objectives and the progressive rehabilitation obligations in this approval;

17. In the Notes to condition 28 of Schedule 3, delete the term "*Biobanking*" and replace with "*Stewardship*".

18. In condition 29 of Schedule 3, after the words "Independent Environmental Audit (see condition 9 of Schedule 5)", insert the words "or approval of each revised version of the Landscape and Rehabilitation Management Plan".

19. In condition 5 of Schedule 5:
(a) before the words "strategies, plans and programs", insert the words "suitability of all";
(b) delete the number "4" and replace with "6".

20. After condition 5 of Schedule 5, insert the following:

CONSULTATION

5A. Where the conditions of this approval require consultation with an identified party, the Proponent must:
(a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
(b) provide details of the consultation undertaken, including:
- the outcome of that consultation, matters resolved and unresolved; and
- details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed any unresolved matters.

However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this consent.

21. In condition 6 of Schedule 5:
(a) delete the words "*Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version)" and replace with "*Community Consultative Committee Guidelines: State Significant Projects (2016)*"; and
(b) in the second bullet point of the Notes, delete the word "on", and replace with "of".

22. In condition 9 of Schedule 5:
(a) after the word "be" in sub-paragraph (a), insert the words "led and ";
(b) after the words "relevant agencies" in sub-paragraph (b), insert the words "and the CCC";
(c) delete the word "and" at the end of sub-paragraph (d);
(d) delete the full stop at the end of sub-paragraph (e) and replace with "; and"; and
(e) insert the following sub-paragraph:

(f) be conducted and reported to the satisfaction of the Secretary.

23. Delete condition 10 of Schedule 5 and replace with the following:

10. Within 3 months of commencing each audit, or within another timeframe agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Proponent must implement these recommendations, to the satisfaction of the Secretary.

24. In Appendix 1, in Statement of Commitment Number 9:
(a) delete the number "7.1" after the words "A total of", and replace with "7";
(b) delete the bullet points and replace with:

- Offset Area A. 1.05 hectares of Scribbly Gum Woodland in the east of Lot 1 DP358717;
- Offset Area B. 1.51 hectares of Scribbly Gum Woodland in the west of Lot 1 DP358717; and

- Offset Area C. 4.44 hectares of Red Bloodwood - Scribbly Gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion in the west of Lot 2 DP358717.

(c) after the words "exclude livestock", insert "(all areas)";
(d) after the word "feral", delete the words "Rusa Deer, intensive", and insert "deer (Areas A and B),";
(e) after the words "environmental weeds", insert "(Areas A and B)"; and
(f) after the words "36 nest boxes will be erected to compensate for the loss of 18 hollow bearing trees.", insert the words "Any shortfall in hollow-bearing trees will be supplemented by installing either salvaged hollow sections of trees at a ratio of one salvaged hollow section per hollow-bearing tree, or nest boxes at a ratio of two salvaged nest boxes per hollow-bearing tree.".

25. Delete Appendix 3 and replace with the following:

APPENDIX 3

BIODIVERSITY OFFSET AND LANDSCAPE BUFFER AREAS

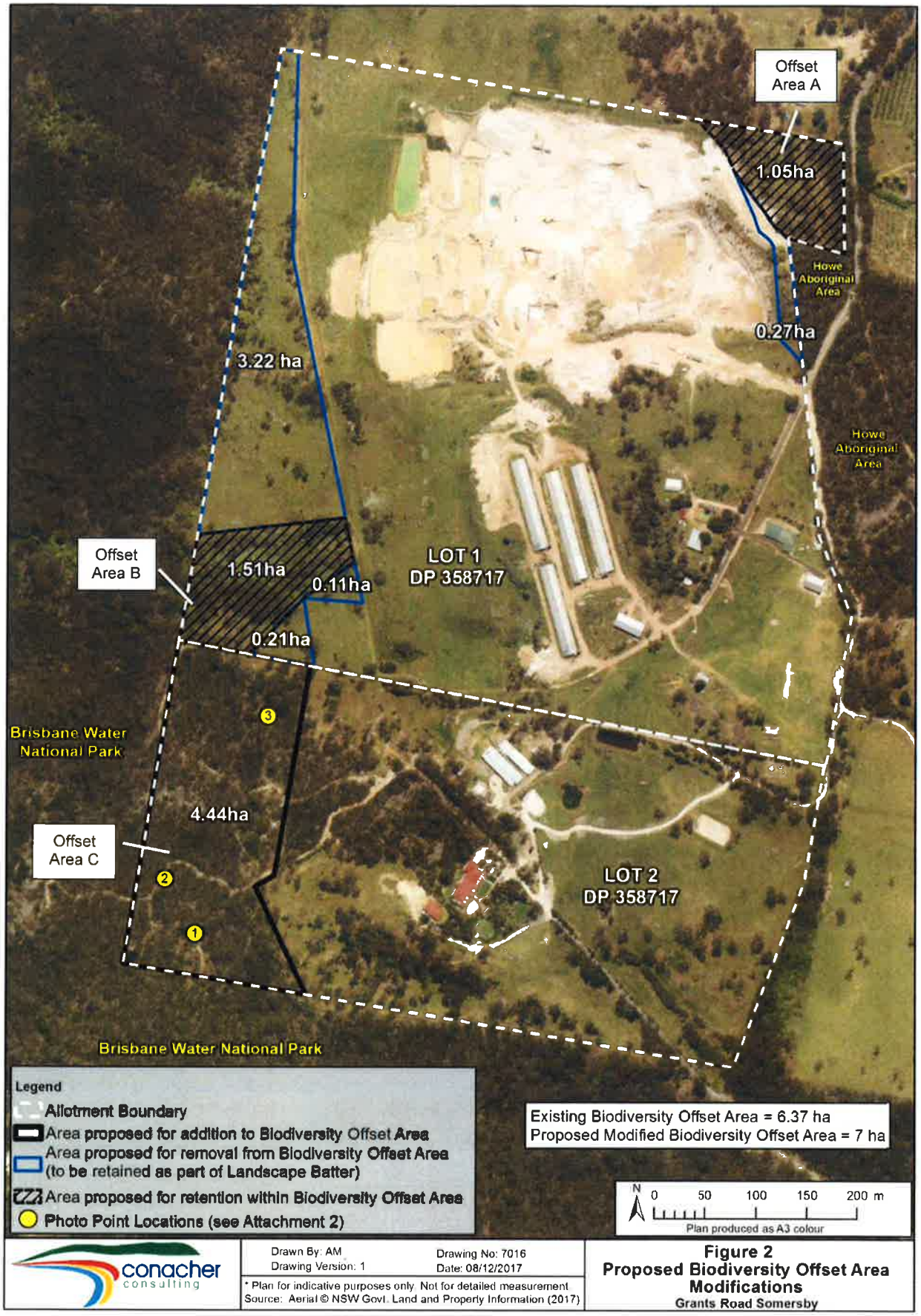


Figure 2
Proposed Biodiversity Offset Area Modifications
Grants Road Somersby

conacher consulting

Drawn By: AM
Drawing Version: 1
Drawing No: 8013
Date: 08/12/2017

* Plan for indicative purposes only. Not for detailed measurement.
Source: Aerial © Nearmap (2018) Air Photo Date: 08/08/2017

Landscape Buffer Areas

Grants Road, Somersby

Appendix 3
APPROVAL CONDITIONS + COMPLIANCE

Compliance Checklist

The requirements under the Project Approval and a summary of the compliance with the relevant condition are outlined in the following table for the project. It should be noted that the following table has been updated in accordance with the Modification to the Project Approval dated 4 May 2018.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
Schedule 2 Administrative Conditions				
1.	In addition to meeting the specific performance measures and criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent, if prevention is not reasonable or feasible, minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Extent of the project	Monitoring of the quarry extension continues to show minimal impacts. Refer to Section 4.0 for monitoring results.	Compliant
2.	The Proponent must carry out the project generally in accordance with the: (a) EA; (b) EA (MODI); and (c) Statement of Commitments	Extent of the project	The project is being carried out generally in accordance with the Environmental Assessment.	Compliant
2A.	The proponent must carry out the project in accordance with the conditions of approval.	Extent of the project	Noted.	Compliant
3.	If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Extent of the project	Noted.	Compliant
4.	The Proponent must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval;	Extent of the project	Noted.	Compliant
	(b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this approval; and	Extent of the project	No additional reports have been commissioned by the Department.	Not triggered.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
	(c) the implementation of any actions or measures contained in these documents.	Extent of the project	Actions have been undertaken in accordance with the actions identified by the Department.	Compliant
5.	If the project has not been physically commenced within 5 years of the date of this approval, then this project approval shall lapse.	Within 5 years being 25 July 2019	Project has been physically commenced.	Compliant
6.	The Proponent may carry out quarrying operations on the site until 30 June 2044.	30 Jun 2044	Consent still operational.	Compliant
7.	Production must not extract, process and transport more than 250,000 tonnes of quarry products.	Per calendar year	The annual production for the quarry for 2023 was 168159.04 tonnes.	Compliant
8.	Surrender of existing development consent for the quarry	By the end of December 2015	The existing development consent was surrendered by notification to the then Gosford City Council (now Central Coast Council).	Compliant
9.	Conditions of this approval shall prevail to the extent of any inconsistency with the conditions of that consent	Prior to the surrender of the above development consent.	Condition no longer applicable as the previous consent has been surrendered.	Compliant
10.	All new and upgraded structures to comply with the relevant requirements of the BCA	Prior to construction	No new or upgraded structures undertaken.	Not triggered
11.	Demolition work carried out in accordance with the relevant Australian Standard	At demolition	No demolition works undertaken.	Not triggered
12.	Protection of public infrastructure	At all times	No impact on public infrastructure.	Compliant
13	All plant and equipment maintained and operated in a proper and efficient manner	At all times	Plant and equipment monitored as part of the Annual Review.	Compliant
14.	Updating and staging of strategies, plans or programs to incorporate any appropriate additional measures to improve the environmental performance of the project.	On a regular basis	Air Quality Management Plan updated.	Compliant.
15.	Provide quarry production data to DRG and report as part of the Annual Review.	Annually	Production data provided to DRG. Production data recorded in the Annual Review.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
16.	A registered surveyor to mark out the boundaries of the approved limits of extraction within the entire site and submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	30 September 2014	Survey undertaken and provided to the Department. Survey marks outlined on the boundary.	Compliant.
17.	Ensure boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.	Extent of quarrying operations	Survey marks are in place.	Compliant.
18.	Ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project.	Extent of quarrying operations	Incorporated as part of induction of employees and subcontractors.	Compliant.
Schedule 3 Environmental Performance Conditions				
Soil and Water				
1.	Ensure sufficient water for the project	Extent of quarrying operations.	Sufficient water is available for the project.	Compliant.
2.	Provide a compensatory water supply to any owner of a privately-owned groundwater bore where monitoring indicates that the project is causing (or contributing to, in conjunction with another quarry project).	When there is a reduction in pumping yield of more than 10% or a 2 m decline in the water table.	Not applicable as there has not been the decline in the water table.	Not triggered.
3.	Compliance with s120 of the POEO Act.	Extent of the project	There has been no pollution of water.	Compliant.
4.	Preparation of the Water Management Plan	30 November 2014	Water Management Plan prepared and approved by the Department. The WMP will be updated to include an investigation of opportunities to maintain ecosystem function in high priority GDEs to the west and northwest of the project through facilitating run-on of clean surface waters.	Compliant.

<table>
<tr><th>Condition of consent number</th><th>Compliance requirement</th><th>Development phase</th><th>Evidence and comments</th><th>Compliance status</th></tr>
<tr><td colspan="5">Noise</td></tr>
<tr><td>5.</td><td>Construction activities and quarrying operations on the site to only occur:
(a) between 7.00 am and 6.00 pm, Monday to Friday;
(b) between 7.00 am and 1.00 pm, Saturday; and
(c) at no time on Sunday or public holidays.</td><td>Extent of the project</td><td>GRSQ reports it has operated within the operating hours.</td><td>Compliant.</td></tr>
<tr><td>6.</td><td>The following activities may be carried out on the site outside the hours specified in condition 5:
(a) delivery or dispatch of materials as requested by Police or other authorities; and
(b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.</td><td>Extent of the project</td><td>Noted.</td><td>Not triggered.</td></tr>
<tr><td>7.</td><td>The Proponent must ensure that the construction and operational noise generated by the project at any residence on privately owned land does not exceed the following:
<table>
<tr><th>Receiver Location</th><th>LAeq,15min dB(A)</th></tr>
<tr><td>All privately owned residences</td><td>40</td></tr>
</table>
This noise criteria does not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of the agreement.</td><td>Extent of the project</td><td>The Noise monitoring reports show that operational noise on private residences does not exceed 40 dB(A).</td><td>Compliant.</td></tr>
<tr><td rowspan="4">8.</td><td>The Proponent must:
(a) implement best management practice to minimise the construction, operational and road noise of the project;</td><td>Extent of the project</td><td>The quarry operates in accordance with the consent.</td><td>Compliant.</td></tr>
<tr><td>(b) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this approval;</td><td>Extent of the project</td><td>Noise criteria is met.</td><td>Compliant.</td></tr>
<tr><td>(c) maintain the effectiveness of noise suppression equipment on plant and equipment on site;</td><td>Extent of the project</td><td>Noise suppression on equipment is maintained where relevant.</td><td>Compliant.</td></tr>
<tr><td>(d) minimise the noise impacts of the project during meteorological</td><td>Extent of the project</td><td>Noise impacts minimised.</td><td>Compliant.</td></tr>
</table>

<table>
<tr><th>Condition of consent number</th><th>Compliance requirement</th><th>Development phase</th><th>Evidence and comments</th><th>Compliance status</th></tr>
<tr><td></td><td>conditions under which the noise limits in this approval do not apply;</td><td></td><td></td><td></td></tr>
<tr><td></td><td>(e) carry out regular noise monitoring to determine whether the project is complying with the relevant conditions of this approval, to the satisfaction of the Secretary.</td><td>Extent of the project</td><td>Noise monitoring carried out.</td><td>Compliant.</td></tr>
<tr><td>9.</td><td>Preparation of the Noise Management Plan</td><td>30 November 2014</td><td>Noise Management Plan prepared and approved by the Department.</td><td>Compliant.</td></tr>
<tr><td colspan="5">Air Quality</td></tr>
<tr><td>10.</td><td>Ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed below at any residence on privately-owned land

Long-term criteria for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging Period</th><th>d Criterion</th></tr>
<tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>[a] 90 µg/m^3</td></tr>
<tr><td>Particulate matter < 10 µm (PM_{10})</td><td>Annual</td><td>[a] 30 µg/m^3 Note 1</td></tr>
</table>
Note 1: 30 µg/m^3 criterion has been amended to 25 µg/m^3</td><td>Extent of project</td><td>Dust deposition sampling and PM10 monitoring measurements undertaken.
No exceedances in reporting period for PM10 or deposited dust.</td><td>Compliant.</td></tr>
<tr><td></td><td>Short-term criteria for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging Period</th><th>d Criterion</th></tr>
<tr><td>Particulate matter < 10 µm (PM_{10})</td><td>24 hours</td><td>a 50 µg/m^3</td></tr>
</table></td><td>Extent of project</td><td>Reported results are well within the EPA maximum 24-hour average criterion of 50 µg/m^3.</td><td>Compliant.</td></tr>
</table>

<table>
<tr><th>Condition of consent number</th><th>Compliance requirement</th><th>Development phase</th><th>Evidence and comments</th><th>Compliance status</th></tr>
<tr><td></td><td>Long-term criteria for deposited dust
<table>
<tr><th>Pollutant</th><th>Averaging Period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr>
<tr><td>[c] Deposited Dust</td><td>Annual</td><td>[b] 2 g/m^2/month</td><td>[a] 4 g/m^2/month</td></tr>
</table></td><td>Extent of project</td><td>The results of the dust deposition level over the recorded period are below the EPA cumulative annual average criterion of 4 µg/m^3.</td><td>Compliant.</td></tr>
<tr><td></td><td>Impact assessment criterion for crystalline silica
<table>
<tr><th>Pollutant</th><th>Averaging Period</th><th>d Criterion</th></tr>
<tr><td>[e] Chronic Reference Exposure Level (REL) (PM4)</td><td>Annual</td><td>3 µg/m^3</td></tr>
</table></td><td>Undertake monitoring at maximum throughput. Monitoring will be repeated quarterly and if two consecutive results demonstrate low risk the monitoring will be discontinued.</td><td>The results of the measured samples of respirable crystalline silica are below the relevant standards.</td><td>Compliant.</td></tr>
<tr><td>11</td><td>The Proponent must:
(a) implement best practice management to minimise the dust emissions of the project;</td><td>Extent of project</td><td>Dust emissions are minimised. Air quality is well below the air quality criteria.</td><td>Compliant.</td></tr>
<tr><td></td><td>(b) regularly assess air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval;</td><td>Extent of project</td><td>Of a possible 60 samples (over 12 months), fifty-six (56) samples are reported, resulting in a data recovery of approximately 93%. For reference, this data capture is below the recommended 95% but above the absolute minimum of 75% for data completeness for averaging purposes specified for reporting under the National Environment Protection Measure for Ambient</td><td>Non-compliant.</td></tr>
</table>

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
			Air Quality (Peer Review Committee, 2001). The reason for the slightly reduced number of samples taken is that the HVAS did not record. Further monitoring of the HVAS will continue. The average PM_{10} concentration over the recorded 12 month period is well below the annual EPA impact assessment criterion as outlined above	
	(c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 5);	Extent of project	The Air Quality Management Plan includes protocols for adverse meteorological conditions and extraordinary events.	Compliant.
	(d) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site; and	Extent of project	Equipment is monitored to minimise the release of greenhouse gas emissions	Compliant.
	(e) minimise the area of surface disturbance and maximise progressive rehabilitation of the site; and	Extent of project	The area of quarrying is minimised and will be progressively rehabilitated as required.	Compliant.
	(f) carry out regular air quality monitoring to determine whether the project is complying with the relevant conditions of this approval, to the satisfaction of the Secretary.	Extent of project	As outlined in (b) above.	Non-compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
12.	Prepare the Air Quality Management Plan	30 November 2014	The Air Quality Management Plan has been prepared and updated to incorporate the above.	Compliant.
Meteorological Monitoring				
13.	Ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.	Extent of the project	A meteorological station has been placed on site. However, Data capture for all meteorological parameters was low: 69% for temperature, 16% for rainfall and 6% for wind speed and direction in 2023. This is likely due to a combination of factors, including a potential telemetry issue that prevented uploading of meteorological parameters from September onwards, and a possible faulty wind sensor. Grants Road Sand are liaising with the data storage provider to determine the poor data capture and what can be implemented. AWS data to be checked regularly throughout the year to identify any faults.	Non-Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
Transport				
14.	Keep accurate records of the: • Amount of quarry products transported from the site (per calendar month and year) and • Number of laden vehicle movements from the site (per hour, day, week, calendar month and year).	Publish the records on the website biannually	Records exhibited on the website and recorded in the Annual Review.	Compliant.
15.	Ensure that: • Project related heavy vehicles enter and exit the site in a forward manner. • All loads will be covered entering or leaving the site. • All laden vehicles leaving the site are cleaned of sand and other material that may fall on the road, before leaving the site.	Extent of the project	GRSQ ensures that project related heavy vehicles comply.	Compliant.
16.	In conjunction with the operator of the Central Coast Sands Quarry, prepare a road condition assessment and road maintenance contributions study of Grants Road.	31 March 2015	Grants Road assessment and maintenance report prepared and approved by the Department.	Compliant.
17.	Pay contributions to Council for the maintenance of Grants Road	Payment in accordance with the study required under condition 16, unless otherwise agreed by the Secretary.	Contributions paid to Central Coast Council.	Compliant.
18.	Prepare a Traffic Management Plan including a drivers' code of conduct.	30 November 2014	Traffic Management Plan prepared and approved by the Department.	Compliant

<table>
<tr><th>Condition of consent number</th><th>Compliance requirement</th><th>Development phase</th><th>Evidence and comments</th><th>Compliance status</th></tr>
<tr><td colspan="4">Biodiversity</td><td></td></tr>
<tr><td>19.</td><td>Ensure that the project does not cause any exceedances of the performance measures in the following table, to the satisfaction of the Secretary

<table><tr><th>Feature</th><th>Measure</th></tr><tr><td>High priority GDEs located within 1 kilometre of extraction operations</td><td>Major environmental consequences including:
• negligible erosion of the surface of the GDEs;
• negligible sedimentation within the GDEs;
• minor changes in the size of the GDEs;
• no significant change to the composition or distribution of species within the GDEs.</td></tr><tr><td>Somersby Mintbush</td><td>Exceedances of Trigger Levels</td></tr></table></td><td>Annually</td><td>Environmental reporting identifies no exceedances.</td><td>Compliant.</td></tr>
<tr><td>20.</td><td>If the performance measures in Condition 19 are exceeded and the Secretary determines that:
(a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
(b) remediation measures implemented by the Proponent have failed to satisfactorily remediate the impact or environmental consequence;
then the Proponent shall provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Secretary.</td><td>As required</td><td>To be undertaken as part of the Annual reporting for the Department of Planning.</td><td>Not triggered.</td></tr>
<tr><td>21.</td><td>Undertake additional studies on the high priority GDEs located within 1 kilometre of extraction operations under the approval and potentially impacted by the project. The studies must be undertaken in consultation with DoI Water.</td><td>Annually</td><td>GDE Monitoring and Management Plan approved by the Department.</td><td>Compliant.</td></tr>
</table>

<table>
<tr><th>Condition of consent number</th><th>Compliance requirement</th><th>Development phase</th><th>Evidence and comments</th><th>Compliance status</th></tr>
<tr><td>22.</td><td>The Proponent must prepare and implement, in consultation with OEH and Council, a Somersby Mintbush (Prostanthera junonis) Monitoring Program within the vicinity of the site.</td><td>Annually</td><td>Somersby Mintbush Monitoring Plan approved by the Department.</td><td>Compliant.</td></tr>
<tr><td>23.</td><td>Implement the biodiversity offset strategy described in the EA, EA (EA Mod 1) and Landscape and Rehabilitation Management Plan and as summarised and revised in the following table:
<table>
<tr><th>Area</th><th>Offset Criteria</th><th>Size (ha)</th></tr>
<tr><td>On-site offset area</td><td>Existing vegetation to be managed and maintained as:
• Scribbly Gum Woodland and/or other native vegetation community commensurate with the local surroundings, including at least 4.44 ha in moderate to good condition; and
• suitable habitat for threatened fauna species including the provision of at least 36 nest boxes in the biodiversity offset and landscape buffer areas.</td><td>7.0</td></tr>
</table></td><td></td><td>The on-site offset area has been set aside. 36 nest boxes have been placed within the area.</td><td>Compliant.</td></tr>
</table>

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
24.	The Proponent must: (a) engage an independent registered surveyor to survey and permanently mark the boundaries of the offset areas; (b) submit a survey plan of these boundaries to the Secretary; (c) ensure that these boundaries are clearly marked at all times in a permanent manner; (d) cause restrictive and positive covenants under the *Conveyancing Act 1919* to be placed on the titles of the land referring to the surveyed offset areas, to ensure that the Proponent and the landowner: - manage the offset areas for conservation in perpetuity; - implement the Landscape and Rehabilitation Management Plan; and - permit ongoing access to the offset areas by the Department and other relevant public authorities for the purposes of monitoring.	Within 6 months of the determination of Modification 1, or as otherwise agreed by the Secretary,	The surveyor has prepared and submitted the survey plan to the Department of Planning. The surveyor has also completed and submitted the revised Landscape and Rehabilitation Management Plan and Biodiversity offset area and Habitat Rehabilitation Plan to reflect the modified Biodiversity Offset Strategy. The 88B Instrument has been lodged with the Department	Compliant.
Landscape				
25.	Rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EA, EA (Mod 1) and Landscape and Rehabilitation Management Plan comply with the following objectives: • Safe, stable and non-polluting. • Minimise the visual impact of the final landforms as far as is reasonable and feasible. • Surface infrastructure to be decommissioned and removed, unless the Secretary agrees otherwise. • Quarry benches suitably landscaped and revegetated using native species. • Establish land with a level of at least Class 4 agricultural suitability over 80% of the quarry floor. • Ensure public safety. • Minimise the adverse socio-economic effects associated with quarry closure.	At the end of the quarry project.	Not applicable at this time of review.	Not triggered.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
26.	Rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active, and which are not ready for final rehabilitation.	Progressively throughout the quarry operations as required.	Not applicable at this time as all open areas are currently being quarried.	Not triggered.
27.	Prepare and implement a Landscape and Rehabilitation Management Plan for the site, including the offset area, to the satisfaction of the Secretary.	31 July 2015 Revised plan November 2019	Landscape and Rehabilitation Management Plan prepared and approved by the Department.	Compliant.
28.	Lodge a Conservation and rehabilitation bond with the Department.	Within six months of approval of the Landscape and rehabilitation management plan	Conservation and rehabilitation bond lodged with the Department.	Compliant.
29.	Review, and if necessary, revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must: (a) consider the performance of the implementation of the rehabilitation of the site to date; (b) consider the effects of inflation; and (c) calculate the cost of rehabilitating the disturbed areas of the site taking into account the likely surface disturbance over the next 3 years of quarrying operations.	Within 3 months of each Independent Environmental Audit	Completed.	Compliant.
Heritage				
30.	Prepare Heritage Management Plan	30 November 2014	Heritage Management Plan prepared and approved by the Department.	Compliant.
Visual				
30.	Implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project to the satisfaction of the Secretary.	Extent of project.	Bunds are progressively vegetated.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
31.	Vegetate any earthen perimeter bund at the project, using appropriate flora species to minimise the visual and off-site sedimentation impacts of the project; and maintain this vegetation in a good condition throughout the remainder of the project, to the satisfaction of the Secretary.	Within 3 months of establishing the bund	Perimeter bunds vegetated and to be maintained.	Compliant.
Waste Management				
32.	(a) minimise and monitor the waste generated by the project; (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and (d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Progressively throughout the quarry operations as required and reported annually.	Minimisation of waste.	Compliant.
33.	Obtain a 'resource recovery exemption' under the POEO Act and provide evidence to the Department	Prior to import of any VENM to the site.	EPA have advised that a resource recovery exemption is not required. This has been acknowledged and approved by the Department.	Compliant.
Dangerous Goods				
34.	Ensure that the storage, handling, and transport of dangerous goods are done in accordance with the relevant *Australian Standards*, particularly AS1940 and AS1596, and the *Dangerous Goods Code*	Extent of project.	GRSQ ensure appropriate storage and handling.	Compliant.
Bushfire				
35.	Ensure that the project is suitably equipped to respond to any fires on site and assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Extent of project.	GRSQ ensure appropriately equipped.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
Schedule 4 Additional Procedures				
1.	Notification of monitoring results to landowners where: (a) An exceedance of any relevant criteria in Schedule 3, the Proponent must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the project is again complying with the relevant criteria, and. (b) an exceedance of any relevant air quality criteria in Schedule 3, the proponent shall send a copy of the NSW Health fact sheet entitled Mine Dust and You (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately owned).	As soon as practicable after obtaining monitoring results	No exceedances have been determined as part of the monitoring results.	Compliant.
2.	If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land. If the Secretary is satisfied that an independent review is warranted, then the Proponent must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and • if the project is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	Within 2 months of the Secretary's decision.	Not required at this time of the review.	Not triggered.
Schedule 5 Environmental Management, Reporting and Auditing				
1.	The Proponent must prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary	30 November 2014	Environmental Management Strategy prepared and approved by the Department.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
2.	The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines	Annually	Noted.	Compliant.
3.	Assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.	Extent of Project.	Assessed as part of the monitoring and annual review.	Compliant.
4.	Annual review of the environmental performance of the project to the satisfaction of the Secretary.	By the end of March each year, or other timing as may be agreed by the Secretary.	Submitted by the end of March 2023.	Compliant.
5.	Review the strategies, plans and programs required under this approval, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.	Within 3 months of the submission of an: (a) annual review under condition 4 above; (b) incident report under condition 7 below; (c) audit report under condition 9 below; or (d) any modification to the conditions of this approval,	Noted.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
5A	Where the conditions of this approval require consultation with an identified party, the Proponent must: (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and (b) provide details of the consultation undertaken. However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this consent.	Extent of Project.	Not required to date.	Not triggered.
6.	Establish and operate a Community Consultative Committee (CCC) to the satisfaction of the Secretary.	If directed by the Secretary.	The Department of Planning required the quarry to operate under the existing Community Consultative Committee. Currently operational.	Compliant.
7.	Notify the Secretary and any other relevant agencies of any incident. Provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Immediately Within 7 days of the date of the incident.	Grants Road received notification on 28 November 2023 of a high respirable crystalline silica (RCS) result from monitoring conducted 18 November 2023 relating to the bulldozer operator. Grants Road reported this to NSW Resource Regulator on the 28 November 2023 as this is a notifiable incident.	Compliant
8.	Provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Extent of project.	Complies. All reporting provided on the website once approved.	Compliant.

Condition of consent number	Compliance requirement	Development phase	Evidence and comments	Compliance status
9.	Commission and pay the full cost of an Independent Environmental Audit of the project.	By 30 June 2015 and every 3 years thereafter, unless the Secretary directs otherwise.	Initial Independent Environmental audit undertaken in 2015, 2018 and 2021. Next Environmental audit due June 2024.	Compliant.
10.	Submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	Within 3 months of completion of the audit, or as otherwise agreed by the Secretary.	Independent Environmental Audit submitted.	Compliant.
11.	Make copies of the following publicly available on its website: • the documents referred to in condition 2 of Schedule 2; • all current statutory approvals for the project; • all approved strategies, plans and programs required under the conditions of this approval; • a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs; • a complaints register, updated monthly; • the annual reviews of the project; • any independent environmental audit, and the Proponent's response to the recommendations in any audit; • minutes of CCC meetings; • any other matter required by the Secretary; and keep this information up to date, to the satisfaction of the Secretary.	Extent of project	The Grants Road Sand Quarry website incorporates: • Modification to The Project Approval • The Project Approval • Environmental Assessment • The Environmental Strategy • Plans of Management • Complaints Register • Truck movements • Independent Audit • Annual Reviews • Minutes of the CCC meetings	Compliant.

Appendix 4
WATER QUALITY MONITORING
Larry Cook Consulting Pty Ltd

Larry Cook Consulting Pty Ltd

SURFACE WATER AND GROUNDWATER MONITORING PERIOD 1.1.23 – 31.12.23

GRANTS ROAD SAND QUARRY

Grants Road Sand
Lot 1 in DP358717
270 Grants Road Somersby

PREPARED FOR: **GRANTS ROAD SAND**

PROJECT NUMBER: **24005**

DATE: **24TH JANUARY 2024**

Larry Cook Consulting
(ABN 27 159 132 055)

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1 x PDF	24005-A	Ver 1	24th January 2024	Grants Road Sand

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1.0 INTRODUCTION

1.1 BACKGROUND, PURPOSE AND OBJECTIVES

Grants Road Sand was granted state government approval to produce a range of sand products and high-quality hard rock in their quarrying operations at Lot 1 in DP358717, 270 Grants Road Somersby (the Site). A modified project approval was granted by the Minister of Planning under Section 75J of the Planning and Assessment Act 1979 in 2018 to incorporate Lot 2 in DP 358717 and a modification (MOD 1) regarding a Biodiversity Offset Area.

Grants Road Sand hold Environmental Protection License No.11240 issued under the *Protection of the Environment Act 1997*. The License authorises scheduled activities at the Site. Following a several applications from Grants Road Sand to vary the license conditions commencing 10 May 2016, and subsequent responses from NSW EPA, a variation of License No.11240 was granted by letter notification on 12th October 2021 (Notice No.1603746).

The variation relevant to water monitoring references Condition P1.2 – *varied water discharge and monitoring points to 'W1', 'W4' and 'S1' and geographic coordinates*.

Larry Cook Consulting Pty Ltd was commissioned by *Grants Road Sand* to prepare an annual Water Monitoring Report documenting the results of ongoing water monitoring in a network of dedicated monitoring bores and surface water monitoring sites strategically located within the *Grants Road Sand* quarry precinct. Monitoring included collection and compilation of automated water level measurements and prescribed water quality testing.

The objectives of the water monitoring are documented in the Groundwater Management Plan prepared by *Larry Cook Consulting Pty Ltd* for *Grants Road Sand* in 2014 (Ref. 11017-D dated November 2014) and in the Surface Water Management Plan prepared by *Larry Cook Consulting Pty Ltd* for *Grants Road Sand* in 2015 (Ref. 11017-E dated February 2015). The objectives of the management plans were prepared in accordance with Schedule 3 Part 4 (c) (i, ii, iii & iv) of the Project Approval.

2.0 SITE DETAILS

2.1 LOCATION AND SITE IDENTIFICATION

The existing sand quarry and proposed quarry extension are located on Grants Road in Lots 1 and 2 in DP358717 on the Somersby Plateau.

The location of the Property is shown in **Figure 1** and the most recent Near Map image (29th October 2023) with the property boundaries presented in **Figure 2.**. The topographic map sheet covering the Property is the 1:25,000-scale Gosford topographic map sheet (9131-2S.) The approximate MGA coordinates of the centre of the proposed Project Site are Easting 338500 m and Northing 6304250 m. The key features required to identify the Site are summarised in **Table 1**.

Table 1 **Site Identification Details**	
Site	**Description**
Site Name	Grants Road Sand
Site Owner	G.R. & A.K. Jones
Address	270 Grants Road Somersby NSW 2250
Title Plan	Lots 1 and 2 in DP358717
LGA	Central Coast Council

3.0 WATER MONITORING SITES

A network of groundwater monitoring bores and surface water monitoring sites are established on the Site.

Water level monitoring was undertaken in one dedicated monitoring bores. Water quality sampling and testing is carried out in two monitoring bores and at three surface water monitoring sites.

The locations of the surface water and groundwater monitoring (sample) sites are shown in **Figure 3** and locations of the monitoring bores (sampling and water level) annotated in **Figure 4**. A register of the monitoring sites provided in **Table 2**.

Table 2 **Register of Water Monitoring Sites**					
Monitoring Site	**Monitoring Type**	**Location**	**Coordinates**		**Monitoring**
			Latitude	**Longitude**	
W1	Surface Water	North-west discharge point	33.389232486	151.261317787	Water quality
W4	Surface Water	New discharge into new dam constructed in late 2021 in south-western corner of Lot 1	33.392929548	151.261955886	Water quality
S1	Surface Water	South-west waterway on western boundary of Lot 1	33.392487740	151.260202612	Water quality
G3 (BH 3)	Groundwater	Bore in NW	33.388331468	151.262004099	Water quality and

		corner of Lot 1 (control bore)			automated water level
DDH 1 (G4 replacement)	Groundwater	Northern central part of Lot 1	33.389981712	151.263173542	Water quality and automated water level

4.0 GROUNDWATER LICENSING

Four active groundwater licenses are held by the owners. A register listing the licenses and annual water entitlements is provided in **Table 3**.

Table 3
Water Take

License	WSP and Water Source	Water Entitlement	Passive Take/Inflows	Active Pumping	Total
WAL 36455	Water Sharing Plan North Coast and Porous Rock Kulnura Mangrove Mountain Groundwater Source	14 ML	Passive Take	Nil	82 ML
WAL 36988		50 ML			
WAL 37745		6 ML			
WAL 37746		12 ML			

It is noted that the sand processing operation utilises rainfall stored in dams/ponds. Groundwater is not used for the sand extraction activities or processing operations. A total of 82 ML licensed water entitlement is held which is used to offset pit inflow (passive take) predicted in the computer groundwater model.

5.0 AUTOMATED WATER LEVEL MEASUREMENTS

5.1 BACKGROUND

Automated water level measurements are collected in water level sensors (pressure transducers) originally installed in a network of four monitoring bores.

The existing 2G/3G compatible water level sensors were replaced in April 2021 with *Ontoto Astro* satellite pressure transducers (water level sensors and data loggers) which incorporate Holykell HPT604 Water Level Pressure Sensors each with a pressure range 0-20m.

Subsequently, one of the monitoring bores (G4 (BH4)) was removed during the 2021 reporting period due to pond expansion in this area and DDH2 irreparably damaged during the 2022 reporting period due to expanding proximal slime heaps. Monitoring Bore DDH2 was eventually destroyed between March and May 2023 due to the planned quarry expansion.

The water level sensor in Control Monitoring Bore G3 (BH3) was replaced during the reporting period with an *Ontoto Astro* satellite pressure transducer however, there has been ongoing issues with the new installation, intermittent data uploads and weather-related site access difficulties. The issues are presently being addressed and it is expected that the problem will be resolved in early 2024.

5.2 WATER LEVEL MONITORING RESULTS

The hydrograph generated for Monitoring Bore DDH1 during the 2023 reporting period is presented in **Figure 5**. Daily rainfall acquired for the BOM weather station at Mangrove Mountain (Station No. 061375) for the monitoring period is also charted. The following observations and comments are provided:

- The water level fluctuations recorded in Monitoring Bore DDH1 directly reflect fluctuations in rainfall recorded in the BOM rain gauge at Mangrove Mountain. The hydrograph is relatively subdued due to the relatively deeper semi-confined sandstone-hosted aquifer system. The gradual decline in the piezometric surface (water table) observed from the start of the hydrograph to about mid-February reflects the significant reduction in rainfall in late 2022.
- A general increase in the fluctuating water table between late February and late April 2023 is a response, albeit slightly delayed to several rainfall events including amounts of 47.2 mm on 7th January, 68.8 mm on 30th January and 83.6 mm on 22nd February. Smaller amounts of 15.6 mm on 5th January, 34.4 mm over two days commencing 19th January, 10.2 mm on 27th January and 24.0 mm on 19th February have contributed to aquifer recharge.
- A general fall in the water table is observed between late April 2023 and late October. The overall slope of the hydrograph is less than that recorded in early 2023 with a general flattening noted between mid-September and late October.
- A small but noticeable rise in the water table between late October and mid-November is a response to a general increase in the number of small to moderate rainfall events during the same period.
- No potential impacts from current approved quarrying activities on the sandstone-hosted aquifer system were detected.

6.0 WATER SAMPLING

Prescribed water sampling was undertaken in the nominated groundwater monitoring bores and surface water monitoring sites by *Grants Road Sand* during the reporting period 1.1.23 through 31.12.23. A total of six campaigns of sampling and testing was undertaken in 2023.

The samples were submitted to the project's NATA accredited laboratory ALS Environmental for a suite of prescribed tests and determinations listed in **Table 4**. The samples were transported to the project laboratory in an esky under Chain of Custody (COC) protocol.

Table 4 **List of Analytes and Tests**
pH
Total Suspended Solids (TSS)
Total Dissolved Solids
Nitrite + Nitrate as N
Total Kjeldahl Nitrogen as N
Total Nitrogen as N
Total Phosphorus as P

7.0 QUALITY ASSURANCE & QUALITY CONTROL

7.1 DATA QUALITY OBJECTIVES

The data quality objectives of the investigation were to obtain sufficient representative data to allow a high-quality groundwater assessment including:

- Characterisation of groundwater quality; and
- Identification of any risks posed to the environment.

The assessment was conducted to a standard consistent with generally accepted and current professional consulting practice for such an investigation. The evaluation criteria (Decision Rules) adopted for the investigation are summarised in **Table 5**.

Table 5 **Data Quality Objectives**	
DQO	**Evaluation Criteria**
Documentation completeness	Completion of calibration records, chain of custody documentation, laboratory test certificates from NATA-accredited laboratory
Data comparability	Use of appropriate techniques for the sampling, storage and transportation of samples. Use of NATA accredited laboratory.
Data representativeness	Adequate sampling coverage dictated by distribution of pre-selected monitoring bores, and selection of representative samples
Precision and accuracy for sampling and analysis	Use properly trained and qualified field personnel. Achieve laboratory QC criteria.

7.2 FIELD QA/QC

The Quality Assurance and Quality Control QA/QC protocols used during the fieldwork are listed in **Table 6**.

Table 6
Field QA/QC

Protocol	Description
Sampling Team	The fieldwork was managed and carried out by an experienced technician or suitably trained staff member.
QA/QC System	All fieldwork was conducted in accordance with Industry Standard Sampling Procedure.
Chain of Custody Forms	All samples were logged and transferred under appropriately completed Chain of Custody (COC) Forms.
Preservation	All samples were delivered to the project laboratory in appropriately preserved containers, with preservation consisting of packing samples in eskies with ice.
Blind Field Duplicates	Duplicate testing was not carried out for these assessments.

7.3 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

The project laboratory (ALS) used for the tests and chemical analysis of samples during the 2022 period is NATA accredited for the selected tests and analysis.

8.0 2023 RESULTS

Laboratory results are summarised in **Table 7**. Copies of the laboratory certificates supplied by Grants Road Sand are provided in **Annexures 1 to 6**.

In summary:

- Monitoring Site S1 on the south-western boundary of the Site (drainage) was noted to be dry during all attempts to collect samples in 2023.
- The **pH of the surface water** (W1 and W4) is slightly acidic to near neutral (6.35 to 6.91) which is consistent with measurements from previous monitoring rounds.
- The **pH of groundwater** (G3 and G4 (DDH1)) is slightly to moderately acidic (4.10 to 6.53) which is consistent with measurements from previous monitoring rounds.
- The concentrations of **Total Suspended Solids (TSS)** recorded in the two **surface water** monitoring sites (W1 and W2) ranges from 8 to 34 mg/L.
- The concentrations of **Total Suspended Solids (TSS)** recorded in the two **groundwater** monitoring bores (G3 and DDH1) were all less than the LOR.
- The concentrations of **Total Dissolved Solids (TDS)** recorded in the two **surface water** monitoring sites W1 and W4 were between 63 and 106 mg/L for

Table 7 Composite Analytical Results

SAMPLE		Guidelines			G3																		
DESCRIPTION					Monitoring Bore (Groundwater)																		
DATE					14/3/18	18/6/18	25/9/18	1/12/18	12/8/19	17/12/19	22/5/20	15/12/20	12/5/21	28/9/22	25/10/22	30/11/22	20/12/22	3/3/23	23/3/23	13/7/23	21/8/23	3/10/23	4/1/24
ANALYTE	UNIT	Drinking Water - Health Guidelines [1]	Trigger Value for the Protection of Freshwater Aquatic Ecosystems [2] (95% level protection)	Limit of Reporting																			
pH	pH Units	ISD		0.01	5.83	4.46	4.35		5.25	5.1	5.45	5.34	4.98	4.8	4.58	4.61	6.61	4.67	4.30	5.09	5.08	4.63	3.89
Total Suspended Solids	mg/L			5.0	<5	<5	<5		<5	<5	<5	<5	<5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Dissolved Solids	mg/L			10.0	113	109	99		100		92	96	119	110	93	96	96	110	118	106	74	129	92
Nitrate + Nitrite as N	mg/L			0.0	4.37	4.63	4.64		4.58		5.12	5.06	5.26	7.08	5.26	5.36	5.45	5.16	5.06	4.97	5.75	5.32	6.11
Total Nitrogen as N	mg/L			0.1	4.8	5.2	5.1		5.1		6.7	5.8	6.1	7.7	5.9	6.4	6	6.2	5.8	5.6	6.4	5.7	6.5
Total Kjeldahl Nitrogen	mg/L			0.1	0.4	0.6	0.5		0.5		1.6	0.7	0.8	0.6	0.6	1.0	0.5	1.0	0.7	0.6	0.7	0.4	0.4
Total Phosphorus as P	mg/L			0.01	<0.01	<0.01	<0.01		<0.01		<0.01	<0.01	<0.01	0.02	0.02	<0.01	0.03	0.01	0.01	0.04	<0.01	0.03	<0.01

SAMPLE		Guidelines			G4																		
DESCRIPTION					Monitoring Bore (Groundwater)																		
DATE					14/3/18	18/6/18	25/9/18	1/12/18	12/8/19	17/12/19	22/5/20	15/12/20	12/5/21	28/9/22	25/10/22	30/11/22	20/12/22	3/3/23	23/3/23	13/7/23	21/8/23	3/10/23	4/1/24
ANALYTE	UNIT	Drinking Water - Health Guidelines [1]	Trigger Value for the Protection of Freshwater Aquatic Ecosystems [2] (95% level protection)	Limit of Reporting																			
pH	pH Units	ISD		0.01	5.91	4.68	4.4		5.24	5.2	5.32	4.96	4.51	4.38	4.33	4.42	6.33	4.37	4.10	4.78	6.53	4.35	3.99
Total Suspended Solids	mg/L			5.0	<5	<5	<5		<5	5	<5	<5	<5	6	<5	<5	6	<5	<5	<5	<5	<5	<5
Total Dissolved Solids	mg/L			10.0	124	106	101		100		93	96	120	126	94	94	98	95	102	103	74	128	88
Nitrate + Nitrite as N	mg/L			0.0	4.99	4.24	4.66		4.66		2.00	5.06	5.22	7.16	5.25	5.32	5.46	5.2	5.06	4.92	5.54	5.3	6.28
Total Nitrogen as N	mg/L			0.1	5.7	4.9	5.2		5.3		7.1	5.7	6	7.9	6.2	5.9	6.1	6.2	6	5.5	6.2	5.7	6.8
Total Kjeldahl Nitrogen	mg/L			0.1	0.7	0.7	0.5		0.6		2	0.6	0.8	0.7	0.9	0.6	0.6	1.0	0.9	0.6	0.7	0.4	0.5
Total Phosphorus as P	mg/L			0.01	<0.01	0.01	0.01		<0.01		<0.01	<0.01	<0.01	0.03	0.05	<0.01	0.02	0.01	<0.01	0.05	<0.01	0.02	0.02

SAMPLE		Guidelines			W1																		
DESCRIPTION					Surface Water Monitoring Site																		
DATE					14/3/18	18/6/18	25/9/18	1/12/18	12/8/19	17/12/19	22/5/20	15/12/20	12/5/21	28/9/22	25/10/22	30/11/22	20/12/22	3/3/23	23/3/23	13/7/23	21/8/23	3/10/23	4/1/24
ANALYTE	UNIT	Drinking Water - Health Guidelines [1]	Trigger Value for the Protection of Freshwater Aquatic Ecosystems [2] (95% level protection)	Limit of Reporting																			
pH	pH Units	ISD		0.01	6.67	6.72			7.17		6.41	7.33	6.69	6.99	7.32	6.85	7.43	6.35	6.51	6.36	6.91	6.66	4.81
Total Suspended Solids	mg/L			5.0	15	<5			<5		<5	9	8	12	11	14	15	17	10	34	16	18	13
Total Dissolved Solids	mg/L			10.0	97	178			71		44	71	79	38	49	68	57	86	91	72	77	102	78
Nitrate + Nitrite as N	mg/L			0.0	0.04	0.05	DRY	DRY	0.08	DRY	0.03	0.04	<0.01	<0.01	0.02	<0.01	0.02	<0.01	<0.01	1.81	<0.01	0.04	0.04
Total Nitrogen as N	mg/L			0.1	1.6	1.0			0.9		0.9	1	0.9	0.6	0.9	1.3	1.2	1.0	1.1	2.2	2.0	2.0	1.4
Total Kjeldahl Nitrogen	mg/L			0.1	1.6	1.0			0.8		0.9	1	0.9	0.6	0.9	1.3	1.2	1.0	1.1	0.4	2.0	2.0	1.4
Total Phosphorus as P	mg/L			0.01	0.12	0.08			0.02		0.02	0.06	0.07	0.04	0.1	0.11	0.15	0.1	0.7	0.06	0.17	0.16	0.09

SAMPLE		Guidelines			W4																		
DESCRIPTION					Surface Water Monitoring Site																		
DATE					14/3/18	18/6/18	25/9/18	1/12/18	12/8/19	17/12/19	22/5/20	15/12/20	12/5/21	28/9/22	25/10/22	30/11/22	20/12/22	3/3/23	23/3/23	13/7/23	21/8/23	3/10/23	4/1/24
ANALYTE	UNIT	Drinking Water - Health Guidelines [1]	Trigger Value for the Protection of Freshwater Aquatic Ecosystems [2] (95% level protection)	Limit of Reporting																			
pH	pH Units	ISD		0.01	6.67	6.74			6.91		6.43	6.99	6.71	6.65	6.39	6.83	7.01	6.53	6.38	5.45	6.64	6.58	4.66
Total Suspended Solids	mg/L			5.0	12	<5			7		<5	10	11	10	8	13	18	16	8	8	17	15	22
Total Dissolved Solids	mg/L			10.0	105	174			72		49	68	69	64	53	68	67	63	92	69	92	106	75
Nitrate + Nitrite as N	mg/L			0.0	0.05	0.05	DRY	DRY	0.09	DRY	0.02	0.04	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.02	1.81	<0.01	0.02	0.04
Total Nitrogen as N	mg/L			0.1	1.6	1.0			0.8		0.6	0.9	0.9	1.2	1	1.2	1.1	1	1.1	2.3	1.8	1.9	1.4
Total Kjeldahl Nitrogen	mg/L			0.1	1.5	1.0			0.7		0.6	0.9	0.9	1.2	1	1.2	1.1	1	1.1	0.5	1.8	1.9	1.4
Total Phosphorus as P	mg/L			0.01	0.1	0.08			0.04		0.02	0.07	0.11	0.08	0.11	0.09	0.14	0.11	0.07	0.07	0.14	0.15	0.1

SAMPLE		Guidelines			S1																		
DESCRIPTION					Surface Water Monitoring Site																		
DATE					14/3/18	18/6/18	29/6/17	1/12/18	12/8/19	17/12/19	22/5/20	15/12/2020	12/5/21	28/9/22	25/10/22	30/11/22	20/12/22	3/3/23	23/3/23	13/7/23	21/8/23	3/10/23	4/1/24
ANALYTE	UNIT	Drinking Water - Health Guidelines [1]	Trigger Value for the Protection of Freshwater Aquatic Ecosystems [2] (95% level protection)	Limit of Reporting																			
pH	pH Units	ISD		0.01	6.05	6.51			6.41														
Total Suspended Solids	mg/L			5.0	<5	<5			<5														
Total Dissolved Solids	mg/L			10.0	253	159			72														
Nitrate + Nitrite as N	mg/L			0.0	0.04	0.05	DRY	DRY	0.09	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
Total Nitrogen as N	mg/L			0.1	1.0	1.00			0.60														
Total Kjeldahl Nitrogen	mg/L			0.1	1.0	1.00			0.50														
Total Phosphorus as P	mg/L			0.01	0.07	0.08			0.01														

[1] **Drinking Water Guidelines**: National Water Quality Management Strategy 2011 Version 3.1 updated March 2015

[2] **Australian and New Zealand Guidelines for Fresh and Marine Water Quality**. National Water Quality Management Strategy (ANZECC 2000)

Note: ISD denotes insufficient data to set a guideline value based on health considerations

the 2023 reporting period. These levels indicate low salinity and are, on average slightly higher than past results.

- Levels of **TDS** between 74 and 129 mg/L were recorded in **groundwater** monitoring bores G3 and DDH1 for the 2022 reporting period. These levels also indicate low salinity and are consistent with past test results.
- The concentrations of **Nitrate plus Nitrite** in the two surface water monitoring sites collected in 2023 were either less than the LOR or at very low levels. Two exceptions are a low level of 1.81 mg/L recorded in W1 and W4 in July 2023. The levels of **Nitrate plus Nitrite** recorded in groundwater monitoring bores G4 and DDH1 are between 4.92 and 5.75 mg/L over the five sampling campaigns in 2023. These concentrations are similar to those recorded in past monitoring campaigns. Relative soluble nitrate in in Mangrove Mountain aquifers is likely associated with 120-years of agricultural pursuits in the district.
- The concentrations of **Total Kjeldahl Nitrogen** (TKN) were between 0.4 and 2.0 mg/L in the surface water monitoring sites W1 and W4 to between 0.4 and 1.0 mg/L in the two groundwater monitoring sites G3 and DDH1. These levels and their ranges are similar to those recorded in past monitoring campaigns.
- Levels of **Total Phosphorus** were recorded at between 0.06 and 0.17 mg/L in the two surface water monitoring sites W1 and W4 and between less than the LOR to 0.05 mg/L in groundwater monitoring bores G3 and DDH1. These levels and their ranges are similar to those recorded in past monitoring campaigns. Phosphorus is likely associated with the agricultural history of the area.
- No potential significant impacts from current approved quarrying activities on this sandstone-hosted aquifer system were detected. It is noted however that concentrations of TDS in surface water samples are slightly higher than concentrations recorded in past sampling campaigns. The level however still indicates low salinity.

9.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of surface water and groundwater testing obtained from the 2023 reporting period, the following discussion, conclusions and recommendations are presented.

GEOCHEMISTRY

- The pH of the surface water sampled is slightly acidic that reflects rainwater recharge over the quarry precinct and potential mixing with local groundwater hosted by the Hawkesbury Sandstone. The recorded pH measurements are within the range of acceptable and agreed discharge levels.
- The relatively lower pH values recorded in the groundwater samples reflects recharge by rainwater with low concentrations of dissolved carbonic acid and retention of water within the Hawkesbury Sandstone host. These levels are ‘low’ but often typical of groundwater hosted by the Hawkesbury Sandstone in the Mangrove Mountain area and wider Sydney Basin geological sequence.
- The concentrations of Total Suspended Solids (TSS) recorded in groundwater samples were all less than the LOR however, low TSS levels were recorded in the two surface water samples which are less than the discharge level limit.

- Trace levels of phosphorus in surface water samples and low levels of nitrate+nitrite in groundwater samples likely reflect the 120-year agricultural history in the district (fertilisers and chicken growing).
- No significant impacts from current approved quarrying activities on this sandstone-hosted aquifer system were detected.

WATER LEVEL MONITORING

- The hydrograph for the sandstone-hosted monitoring bore DDH1 displays a positive correlation between water table fluctuations and rainfall events and rainfall amounts. However, the relationship is relatively subdued, and the response slightly delayed which is typical of hardrock-hosted aquifers with no direct connection with the atmosphere.
- No potential impacts from approved quarrying activities on this aquifer system were detected.

RECOMMENDATIONS

- Retain sampling and water quality testing in groundwater monitoring site DDH1 (G4).
- Retain sampling and water quality testing in surface water monitoring sites W1 and W4.
- Replace destroyed groundwater monitoring bore DDH2 with a new groundwater monitoring site, the location of which is subject to state government approval (see Section 10).
- Install a new water level sensor and recorder with telemetry functionality in the new groundwater monitoring bore subject to state government approval. The details are:

  Ontoto Astro IP68 satellite groundwater data logger
  Holykell HPT604 Absolute Level Sensor with pressure range 0-20m

  A description and specification of the Ontoto Astro IP68 is provided in **Annexure 7**.
- Make repairs to Control Monitoring Bore G3 and reconfigure the installed Ontoto Astro IP68 satellite groundwater data logger or replace the sensor/logger.
- Continue acquisition and charting of water level measurements in the existing groundwater monitoring bore DDH1, reconfigure Monitoring Bore G3 and commence data acquisition from the new monitoring bore, when installed.
- Carry out regular routine surface water and groundwater monitoring in the monitoring network during 2024 in accordance with NSWEPA License 11240 and the requirements documented in the surface water and groundwater management plans. This includes maintenance and make repairs to pressure sensors to maintain integrity and communications.
- Continue oil & grease testing at surface water sample site S1 (when flowing) at the frequency of one sample per month when discharge occurs.

- Submit water samples to the project laboratory (ALS) for analysis, compile results and assess any trends and exceedances and, if required, implement a response and action plan in accordance with the environmental management plans.
- Prepare a report giving the results of the 2024 monitoring program and an assessment of any trends and potential impacts. This will include an ongoing assessment of hydrographs, pH, TSS, TDS, nitrogenous compounds and other tests as required.

10.0 REQUEST FOR VARIATION

The proposed variations are:

- Drill and construct a new groundwater monitoring bore to replace Monitoring Bore DDH2. The recommended location of the new bore is shown in **Figure 4**.

  The recommended depth of the monitoring bore is 20.0 m.

  Construction should be in accordance with the *Minimum Construction Requirements for Water Bores in Australia (MCR) Fourth Edition (2020):* Class 18 50 mm UPVC casing, 3.0 m-long slotted Class 18 50 mm UPVC screen at the base of the installation and a 150mm steel monument.
- Install a new Ontoto Astro IP68 satellite groundwater data logger in the new groundwater monitoring bore.

11.0 ENVIRONMENTAL PERFORMANCE

A summary of the environmental performance assessed against the approved criteria documented in the Groundwater Management Plan and Surface Water Management Plan is provided in **Table 8**.

Table 8 Environmental Performance			
Environmental Aspect	**Approval Criteria**	**Summary Monitoring Results Period 1/1/23-31/12/23**	**Proposed Improvement Measures**
Groundwater	Section 4 - Schedule 3 of Project Approval and Appendix 1 - Statement of Commitments. • Undertake automated water level measurements in four nominated monitoring bores G3 (BH3), G4 (BH4), DDH1 & DDH2. Minimum 4 hourly readings. • Undertake groundwater sampling in representative monitoring bores G3 & G4. Six monthly sampling • Undertake automated rainfall measurements – tipping bucket rain gauge.	• The hydrograph for Monitoring Bore DDH1 (G4) reveals fluctuations in water level that are directly attributable to district rainfall events and amounts recorded by the BoM in 2023. • No impacts from quarrying activities on the sandstone-hosted aquifer system were detected. • Automated daily rainfall collected.	• Replace monitoring bore DDH2 with a new monitoring bore 'like for like'. • Install a new water level sensor and recorder with telemetry function in the new monitoring bore. • Carry out repairs as needed in the water level sensor in Control Monitoring Bore BH3 (G3). • Ensure the integrity of the installed sampling equipment and full suite of analytes is tested. • Maintain and calibrate water level sensors.
Surface Water	Section 4 - Schedule 3 of Project Approval and Appendix 1 - Statement of Commitments. • Undertake surface water sampling at representative sampling sites W1, W4 - six monthly sampling and testing when ponds discharging, and monthly testing for site S1 when discharging.	• Results of pH, TDS, TSS, N compounds, TKN, TP • No exceedances or impacts from quarrying activities on the aquifer system were detected	• Continue oil & grease testing at site S1 when discharge occurring

12.0 COMPLIANCE STATUS

A summary of the compliance requirements, monitoring methodology and evidence for the development is provided in **Table 9**.

Table 9
Compliance Status

Section	Compliance Requirement	Development Phase	Monitoring Methodology	Evidence
Section 7 in Appendix 1 - Statement of Commitments Groundwater	• Water level measurements	• At all times	• Automated real time measurements in water level sensors, data loggers with satellite telemetry	• Real time minimum 4-hourly measurements downloaded as required. Data stored/archived in a dedicated data base and hydrographs constructed.
	• Water sampling and testing	• At all times	• Regular prescribed sampling (6 monthly for G3, G4 (DDH1) and 'new' monitoring bore (to be approved)).	• COCs and laboratory certificates with QA/QC documentation
	• Rainfall monitoring	• At all times	• Automated real time measurements of rainfall with telemetry	• Real time 4-hourly measurements downloaded as required. Data stored/archived in a dedicated database.
	• Compile results of the monitoring program including a review and assessment of trends, exceedances and impacts	• Annually	• Reporting	• Annual report

Section 8 in Appendix 1 - Statement of Commitments Surface Water	• Water sampling and testing	• At all times	• Regular prescribed sampling (6 monthly for W1 and W4 and 1 monthly for S1 (when discharge occurring))	• COCs and laboratory certificates with QA/QC documentation
	• Compile results of the monitoring program including a review and assessment of trends, exceedances and impacts	• Annually	• Reporting	• Annual report

13.0 CLOSURE

Please do not hesitate to contact Larry Cook on 0428 884645 if you have any questions or you require further information.

For and on behalf of
Larry Cook Consulting

Larry Cook
Hydrogeologist and Environmental Consultant

ANNEXURES

Annexure 1	**Laboratory Certificate Water Sampling February 2023 Ref. ES2306332**
Annexure 2	**Laboratory Certificate Water Sampling March 2023 Ref. ES2308828**
Annexure 3	**Laboratory Certificate Water Sampling July 2023 Ref. ES2322620**
Annexure 4	**Laboratory Certificate Water Sampling August 2023 Ref. ES2327368**
Annexure 5	**Laboratory Certificate Water Sampling September 2023 Ref. ES2332875**
Annexure 6	**Laboratory Certificate Water Sampling December 2023 Ref. ES2344756**
Annexure 7	**Description and Specifications *Ontoto Astro IP68* Satellite Groundwater Data Logger**

ANNEXURE 1

Laboratory Certificate

Sampling February 2023
Ref. ES2306332

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2306332**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Customer Services ES
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Water Samples	Date Samples Received	: 27-Feb-2023 10:30
Order number	: ----	Date Analysis Commenced	: 27-Feb-2023
C-O-C number	: ----	Issue Date	: 03-Mar-2023 12:22
Sampler	: Steven Jones		
Site	: ----		
Quote number	: Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- TDS by method EA-015 may bias high for sample 1 due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.

Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)			Sample ID	**W1**	**W4**	**G3**	**G4**	**----**
			Sampling date / time	24-Feb-2023 09:05	24-Feb-2023 09:05	24-Feb-2023 09:05	24-Feb-2023 09:05	----
Compound	*CAS Number*	*LOR*	*Unit*	**ES2306332-001**	**ES2306332-002**	**ES2306332-003**	**ES2306332-004**	**--------**
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**6.35**	**6.53**	**4.67**	**4.37**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**86**	**63**	**110**	**95**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**17**	**16**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	**5.16**	**5.20**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**1.0**	**1.0**	**1.0**	**1.0**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.0**	**1.0**	**6.2**	**6.2**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.10**	**0.11**	**0.01**	**0.01**	**----**

ANNEXURE 2

Laboratory Certificate

Sampling March 2023
Ref. ES2308828

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2308828**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Customer Services ES
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Water Samples	Date Samples Received	: 17-Mar-2023 09:50
Order number	: ----	Date Analysis Commenced	: 17-Mar-2023
C-O-C number	: ----	Issue Date	: 23-Mar-2023 11:04
Sampler	: Steven Jones		
Site	: ----		
Quote number	: Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)			Sample ID	W1	W4	G3	G4	----
			Sampling date / time	16-Mar-2023 09:00	16-Mar-2023 09:00	16-Mar-2023 09:00	16-Mar-2023 09:00	----
Compound	*CAS Number*	*LOR*	*Unit*	**ES2308828-001**	**ES2308828-002**	**ES2308828-003**	**ES2308828-004**	--------
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**6.51**	**6.38**	**4.30**	**4.10**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**91**	**92**	**118**	**102**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**10**	**8**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	**0.02**	**5.06**	**5.06**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**1.1**	**1.1**	**0.7**	**0.9**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.1**	**1.1**	**5.8**	**6.0**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.07**	**0.07**	**0.01**	<0.01	**----**

ANNEXURE 3

Laboratory Certificate

Sampling July 2023
Ref. ES2322620

CERTIFICATE OF ANALYSIS

Work Order	: **ES2322620**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Customer Services ES
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Water Samples	Date Samples Received	: 07-Jul-2023 09:00
Order number	: ----	Date Analysis Commenced	: 10-Jul-2023
C-O-C number	: ----	Issue Date	: 13-Jul-2023 14:54
Sampler	: Steven Jones		
Site	: ----		
Quote number	: Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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Signatories

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	W1	W4	G3	G4	----
			Sampling date / time	06-Jul-2023 09:00	06-Jul-2023 09:00	06-Jul-2023 09:00	06-Jul-2023 09:00	----
Compound	CAS Number	LOR	Unit	ES2322620-001	ES2322620-002	ES2322620-003	ES2322620-004	--------
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**6.36**	**5.45**	**5.09**	**4.78**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**72**	**69**	**105**	**103**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**34**	**8**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**1.81**	**1.81**	**4.97**	**4.92**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**0.4**	**0.5**	**0.6**	**0.6**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**2.2**	**2.3**	**5.6**	**5.5**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.06**	**0.07**	**0.04**	**0.05**	**----**

ANNEXURE 4

Laboratory Certificate

Sampling August 2023
Ref. ES2327368

CERTIFICATE OF ANALYSIS

Work Order	: **ES2327368**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Customer Services ES
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Water Samples	Date Samples Received	: 15-Aug-2023 10:15
Order number	: ----	Date Analysis Commenced	: 16-Aug-2023
C-O-C number	: ----	Issue Date	: 21-Aug-2023 14:14
Sampler	: Steven Jones		
Site	: ----		
Quote number	: Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results

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Signatories

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

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Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	W1	W4	G3	G4	----
			Sampling date / time	11-Aug-2023 15:30	11-Aug-2023 15:30	11-Aug-2023 15:30	11-Aug-2023 15:30	----
Compound	CAS Number	LOR	Unit	ES2327368-001	ES2327368-002	ES2327368-003	ES2327368-004	--------
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**6.91**	**6.64**	**5.08**	**6.53**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**77**	**92**	**74**	**74**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**16**	**17**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	**5.75**	**5.54**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**2.0**	**1.8**	**0.7**	**0.7**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**2.0**	**1.8**	**6.4**	**6.2**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.17**	**0.14**	<0.01	<0.01	**----**

ANNEXURE 5

Laboratory Certificate

Sampling September 2023
Ref. ES2332875

CERTIFICATE OF ANALYSIS

Work Order	: **ES2332875**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Customer Services ES
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Water Samples	Date Samples Received	: 26-Sep-2023 09:50
Order number	: ----	Date Analysis Commenced	: 26-Sep-2023
C-O-C number	: ----	Issue Date	: 03-Oct-2023 16:28
Sampler	: Steven Jones		
Site	: ----		
Quote number	: Blanket Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results

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Signatories

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

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Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

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LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- TDS by method EA-015 sample 1,2 may bias high due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	W1	W4	G3	G4	----
			Sampling date / time	22-Sep-2023 11:30	22-Sep-2023 11:30	22-Sep-2023 11:30	22-Sep-2023 11:30	----
Compound	CAS Number	LOR	Unit	ES2332875-001	ES2332875-002	ES2332875-003	ES2332875-004	--------
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**6.66**	**6.58**	**4.63**	**4.35**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**102**	**106**	**129**	**128**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**18**	**15**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.04**	**0.02**	**5.32**	**5.30**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**2.0**	**1.9**	**0.4**	**0.4**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**2.0**	**1.9**	**5.7**	**5.7**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.16**	**0.15**	**0.03**	**0.02**	**----**

ANNEXURE 6

Laboratory Certificate

Sampling December 2023
Ref. ES2344756

CERTIFICATE OF ANALYSIS

Work Order	: **ES2344756**	Page	: 1 of 2
Client	: **Grants Rd Sand Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: Ms Leanne Jones	Contact	: Hayley Worthington
Address	: 270 Grants Rd Somersby NSW 2350	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +612 4014 2500
Project	: Water Samples	Date Samples Received	: 27-Dec-2023 10:45
Order number	: ----	Date Analysis Commenced	: 27-Dec-2023
C-O-C number	: ----	Issue Date	: 04-Jan-2024 13:18
Sampler	: Steven Jones		
Site	: ----		
Quote number	: ----		
No. of samples received	: 4		
No. of samples analysed	: 4		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

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- Analytical Results

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Signatories

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

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Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

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LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	W1	W4	G3	G4	----
			Sampling date / time	20-Dec-2023 16:30	20-Dec-2023 16:30	20-Dec-2023 16:30	20-Dec-2023 16:30	----
Compound	CAS Number	LOR	Unit	ES2344756-001	ES2344756-002	ES2344756-003	ES2344756-004	--------
				Result	Result	Result	Result	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**4.81**	**4.66**	**3.89**	**3.99**	**----**
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**75**	**75**	**92**	**88**	**----**
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	**13**	**22**	<5	<5	**----**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.04**	**0.04**	**6.11**	**6.28**	**----**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**1.4**	**1.4**	**0.4**	**0.5**	**----**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.4**	**1.4**	**6.5**	**6.8**	**----**
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.09**	**0.10**	<0.01	**0.02**	**----**

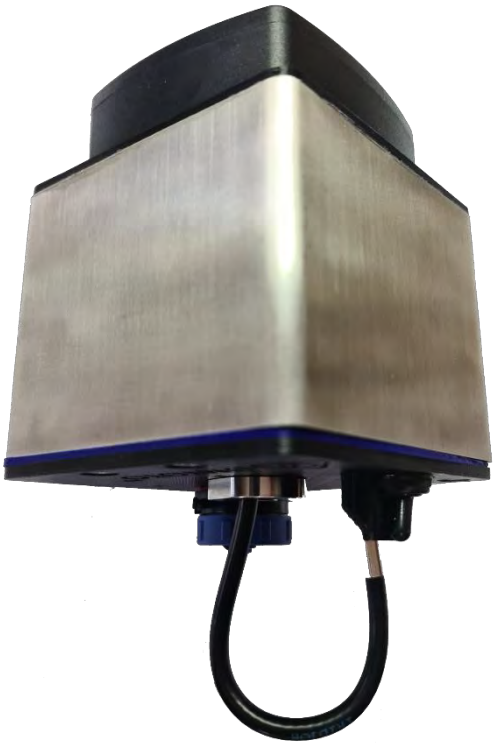
ANNEXURE 7

Description and Specification

Ontoto Astro IP68 satellite groundwater data logger

Astro Satellite Data Logger

The fully integrated low power satellite telemetry solution



Your data, anywhere.

Designed and made in Australia

Feature Description

Using this data logger, you will be able to monitor and manage your monitoring bore remotely once the installation has been completed. With simplicity in mind there is only one toggle switch, one SMA aerial connection and one sensor connector visible on the external casing.

- Satellite connectivity.
- Sensor data stored in flash memory on board as a backup.
- Network synchronised utilising universal co-ordinate time (UTC) for all data points.
- The default configuration has a 4 hour sample interval and weekly reporting frequencies.
- User customisable with site set up tools via Android and MAC IOS app.
- Strong and durable casing to protect the internal hardware.

Astro Optional Extras

- Hi power lithium battery with extended temperature range.
- Various sensor options including water level, EC, pH and turbidity.
- Third party sensor adaptor.

Certification

The Astro Satellite Data Logger has been designed to comply with the Australian Standards:

- AS/NZS 3820:2009 for low voltage battery powered devices.

Site Expectations

- The Astro Satellite Data Logger is a scientific instrument that needs to be installed correctly. If the logger is not installed correctly the accuracy of its data cannot be relied upon.
- The site needs to have a clear view of the sky for best possible satellite connectivity.
- We recommend using a fixed steel monument to mount the Astro. Animals have been known to use the structure as a rubbing post, plastic monuments are easily broken which may then cause network connectivity complications.

Easy Installation

The Astro Satellite Data Logger is a simple turn-key solution. It is designed to be installed into standard 100x100mm or larger steel monument casings with a single bolted connection allowing for easy retrofitting into existing assets onsite.

Battery Specifications

The provided battery pack is comprised of three Lithium-based batteries (ER2500M) in parallel with the following specifications:

- Voltage: 3.6 V
- Capacity: 6000 mAH
- 2500 mA pulse current
- Long shelf life: less than 1% self-discharge rate at 25°C per year
- Temperature range: -55°C to +85°C

Device Specifications

Product Features

- Compatible with a range of intelligent digital sensors including water level, pH and pressure.
- Satellite connectivity via Iridium network.
- Battery powered device, up to 5 years between battery changes (sleeping current draw of only 2µA).
- Remotely configurable by the end user via our Android application and our Web Portal.
- Sampling and reporting frequencies from as little as one minute, to as much as one year.
- Occupies the available space in standard steel monuments for a simple onsite retrofit.
- No proprietary software to receive or access the data.
- Complimentary web portal for device & data management.
- Sensor Power 5V, 12V
- MODBUS
- SDI-12
- Designed and made in Australia.

Technical Specifications

- MODBUS – Holykell sensor provides an operational water column range from 0.5 to 200m.
- Stainless steel and PET casing ensure longevity.
- Operational temperature range from -20 to 80 degrees C.
- Dimensions 90mm (W) x 90mm (L) x 95mm (H).
- Product Weight: 870grams (including batteries)

Sensor specifications

The devices are programmed to support a variety of sensors. The specifications are available on our website. The device also has a built-in pressure sensor for atmospheric correction if needed, the specifications of which are listed below:

MS5607 pressure sensor

- Measures atmospheric pressure with a range of 100-1200 mbar
- Resolution: 0.024 mbar
- Accuracy: ±1.5 mbar at 25°C, 750 mbar
- Maximum error of ±2.5 mbar within operating conditions (-20°C to +85°C, 300-1100 mbar)

Installing 3rd Party Sensors On The Astro Satellite Data Logger

With the mobile application, the device firmware can be modified on-the-fly to support custom sensors. To reconfigure the device, the following requirements are required:

- Internet connection. This is needed to download the new firmware from the server. The firmware can be stored on a phone for later downloading in the field.
- Stable Bluetooth connection. The device should be no more than 2m away from the phone.

Warranty

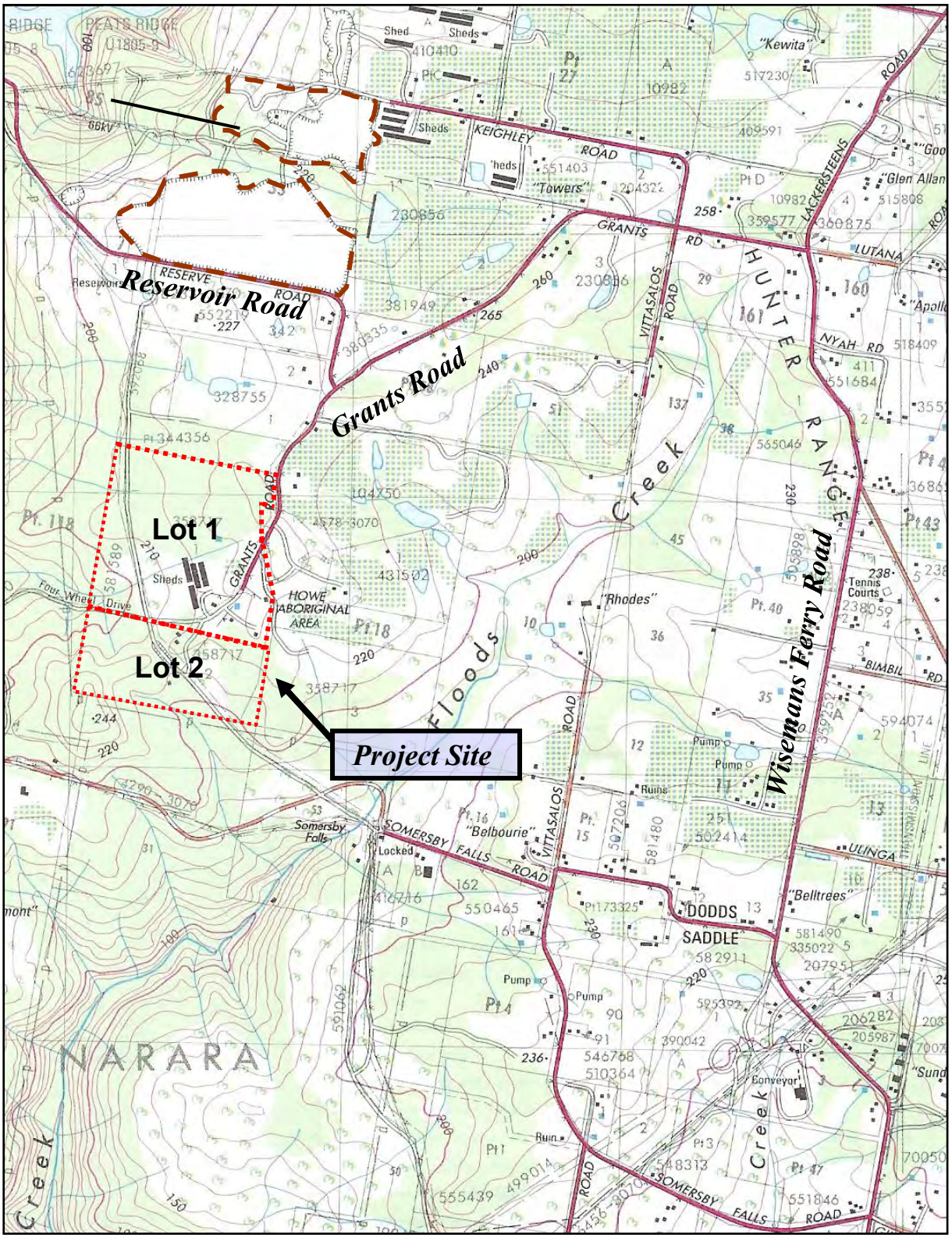
Ontoto Pty Ltd will warrant the entire product (excluding the batteries) for 5 years from the date of delivery for parts and labour.

193 Lackey Road
Moss Vale NSW 2577

www.ontoto.com

Ph: (02) 4869 3732

FIGURES

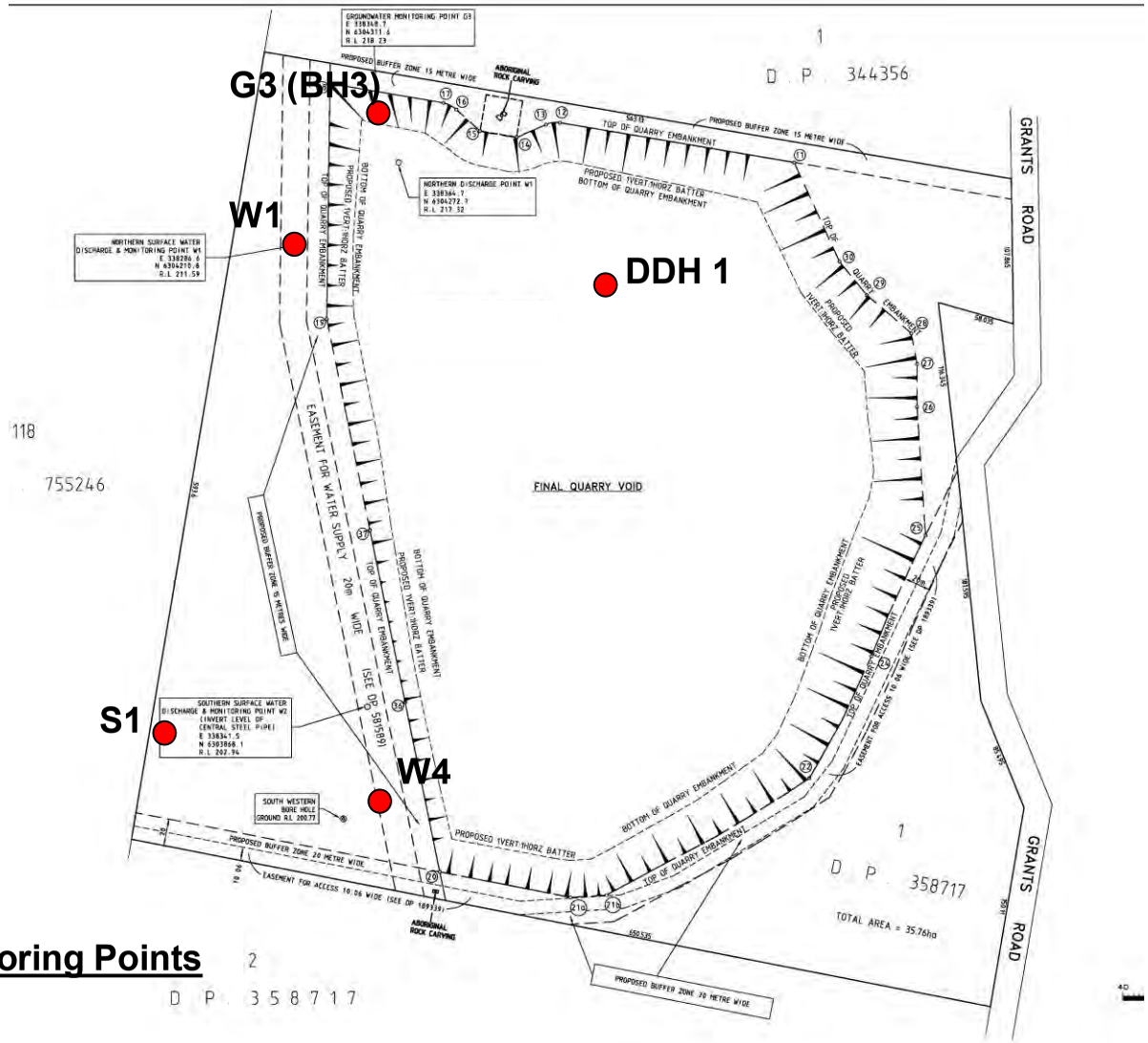


0 m 1000 N

Larry Cook Consulting **PO Box 8146** **Tumbi Umbi NSW 2261** **Ph: 02 4340 1114**	**Grants Road Sand Quarry**	Scale: As shown
	Location of Project Site	**FIGURE 1**

0 m 100 N

Larry Cook Consulting **PO Box 8146** **Tumbi Umbi NSW 2261** **Ph: 02 4340 1114**	**Grants Road Sand Quarry**	Scale: As shown
	Lot Plan Near Map Image 29 October 2023	**FIGURE 2**

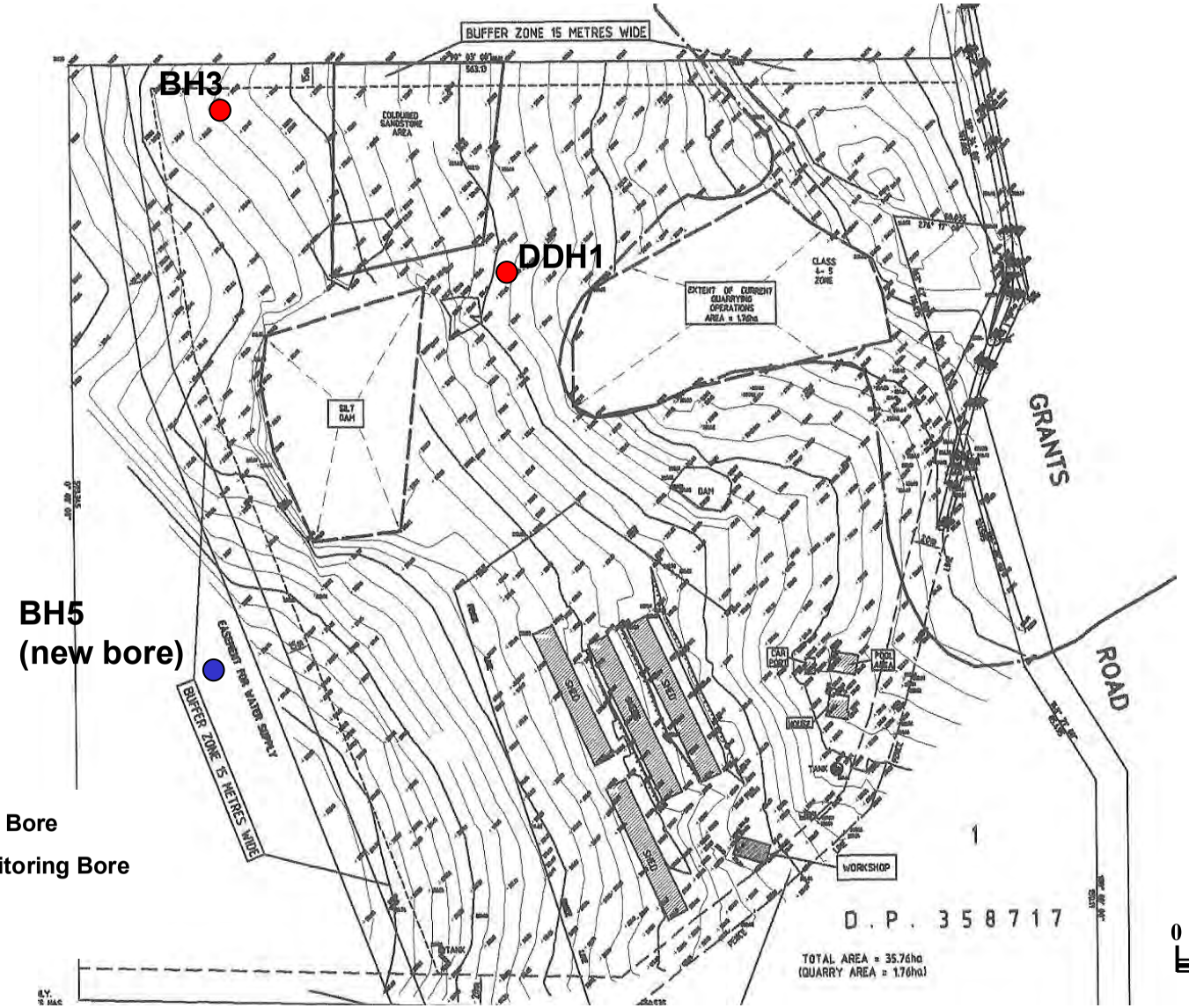


Surface Water Monitoring Points
W1, W4 & S1

Groundwater Monitoring Points
G3, DDH1

Modified after Stephen Thorne & Associates (2015)

Larry Cook Consulting **PO Box 8146** **Tumbi Umbi NSW 2261** **Ph 02 4340 1114**	**Grants Road Sand Quarry** Locations of Monitoring Sites	N	Scale: As shown **FIGURE 3**



Larry Cook Consulting
PO Box 8146
Tumbi Umbi NSW 2261
Ph 02 4340 1114

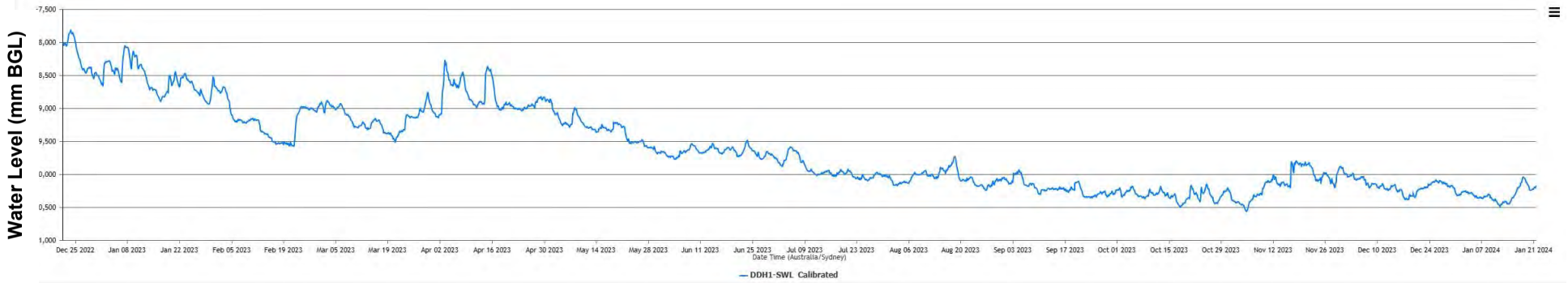
Grants Road Sand Quarry

Site Plan and Locations of Monitoring Bores

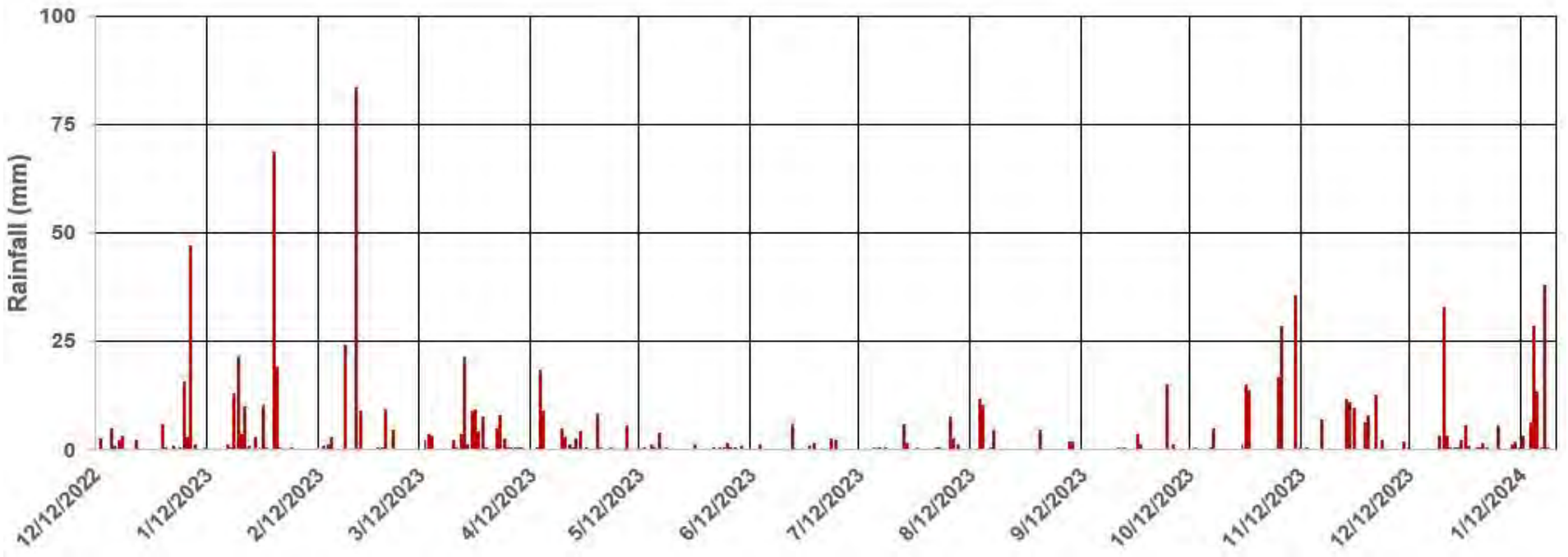
N

Scale: As shown

FIGURE 4



Hydrograph - Monitoring Bore DDH1



Rainfall (Mangrove Mountain Station: 061375

Larry Cook Consulting
PO Box 8146
Tumbi Umbi NSW 2261
Ph 02 4340 1114

Grants Road Sand Quarry

Hydrograph DDH1

N

Scale: As shown

FIGURE 5

Appendix 5
NOISE AUDIT REPORT
Atkins Acoustic

54.7027.R10:GA/DT/2024

ATKINS ACOUSTICS

Postal Address
P.O. Box 432
Gladesville
N.S.W. 1675
AUSTRALIA
A.C.N. 068 727 195
A.B.N. 19 068 727 195
Telephone: 02 9879 4544
Fax: 02 9879 4810
Email: AtkinsAcoustics@bigpond.com.au

Grants Road Sand Pty Ltd.
Grants Road
SOMERSBY NSW 2250

Attention: Steve Jones

24 January 2024

Atkins Acoustics and Associates Pty Ltd.
Consulting Acoustical & Vibration Engineers

ENVIRONMENTAL NOISE AUDIT GRANTS ROAD SAND QUARRY. SOMERSBY ENVIRONMENTAL PROTECTION LICENCE 11240

1.0 INTRODUCTION

Atkins Acoustics was retained by Grants Road Sand Pty Ltd to conduct an environmental noise audit of the Grants Road Sand Quarry (GRS) operations.

This report has been prepared to address the 2021 annual noise monitoring requirements and compliance with the Department of Planning and Environment (DoPE), Application number 08_0099. MOD 1, dated April 2018 and EPA Licence 11240 (dated 12 October 2021, Condition L4. The noise audit period was from 18 January 2023 to 9 January 2024.

Graham Atkins conducted the attended audit. Graham's qualifications and membership include BE, MAAS, MIEAust and CPEng. Atkins Acoustics and Associates Pty Ltd a Member Firm of the AAAC employ Graham. The audit included inspections of the quarry site and inquiries with GRS (Mr Steven Jones). The results and finding of the audit are addressed in the report and an Environmental Performance Table and Compliance Status Table provided in *Attachment 1*.

The quarry currently operates under approval from the Department of Planning and Environment (DoPE), Application number 08_0099. MOD 1, dated April 2018. Specific noise conditions (Schedule 3 - Conditions 5, 6, 7, 8 & 9) contained within the approval include a requirement for the preparation of a *NMP* (*Schedule 3 - Condition 9*) to the satisfaction of the Secretary.

The approval includes:

- extraction, processing and transportation of up to 250,000 tonnes per annum of various grades of washed sand, mortar sand, sandstone blocks and retaining wall rocks for a period of approximately thirty (30) years.
- total extraction of approximately nine point five (9.5) million tonnes (Mt) of extractable sand and sandstone.
- extension of quarry by approximately twenty (20) hectares.
- extraction to depth of thirty-five (35) metres, and
- extraction by dozer and excavator.

The quarry operates from 7.00am to 6.00pm Monday to Friday and 7.00am to 1.00pm Saturday.

2.0 APPROVAL CONDITIONS (Noise)

Project construction and quarry operational noise conditions imposed by the DoPE (*Application Number 08_0099, MOD 1),* dated April 2018 – Schedule 3 are presented below:

NOISE

Hours of Operation

5. The Proponent shall only conduct construction activities and quarrying operations on the site:
   (a) between 7.00 am and 6.00 pm, Monday to Friday;
   (b) between 7.00 am and 1.00 pm, Saturday; and
   (c) at no time on Sunday or public holidays.

   Note: The Proponent may carry out other activities e.g. maintenance, on the site provided that these activities are conducted in a manner that is inaudible at all privately-owned residences.

6. The following activities may be carried out on the site outside the hours specified in condition 5:
   (a) delivery or dispatch of materials as requested by Police or other authorities; and
   (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

   In such circumstances the Proponent shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

Noise Impact Assessment Criteria

7. The Proponent shall ensure that the construction and operational noise generated by the project does not exceed the criteria in Table 1 at any residence on privately-owned land.

Table 1: Noise criteria

Receiver Location	$L_{Aeq\ (15\ min)}$ dB(A)
All privately-owned residences	40

Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*. Appendix 2 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria in Table 1 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of the agreement.

.

The EPA Environmental Protection Licence 11240 (dated 12 October 2021), Limit and Monitoring Conditions L4 and M7 states:

L4.1 Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.

NOISE MONITORING POINT 8,10,13

Time Period	Measurement Parameter	Measurement Frequency	Sound Pressure Level LAeq 15minute
All	LAeq 15minute	n/a	40

L4.2 The noise limits set out in the table at L4.1 apply under all meteorological conditions except for the following:

a) Wind speeds greater than 3 metres/second at 10 metres above ground level;
b) or Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level;
c) or Stability category G temperature inversion conditions.

L4.3 For the purposes of condition L4.2:

a) The meteorological conditions are to be determined from the meteorological data obtained from the meteorological weather station identified as EPA monitoring point 7; and
b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy (EPA 2000).

L4.4 To determine compliance with the noise limits at condition L4.1, the noise measurement equipment must be located:

a) at the most affected point at a location where there is no dwelling at the location; or
b) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
c) within 30 metres of a dwelling façade, but not closer than 3 metres, where any dwelling on the property is situated more than 30 metres from the property boundary; or
d) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.

L4.5 To assess compliance with noise limits for the premises, attended noise monitoring must be undertaken in accordance with the conditions above and:

a) at the three most affected locations listed in the noise monitoring point table at P1.3;

b) occur annually each reporting period at the time of year generally associated with maximum noise transmission (i.e. generally winter conditions);
c) occur during each day period as defined in the NSW Industrial Noise Policy (EPA 2000).
d) in accordance with the relevant requirements and exemptions in the NSW Industrial Noise Policy (EPA 2000).

L4.6 A non-compliance of the noise limits specified in the table at condition L1.4 will still occur where noise generated from the premises in excess of the prescribed limit is measured:

a) at a location other than the monitoring point locations prescribed in the table at condition P1.3; and/or
b) at a point other than the most affected point at a location.

M7 Noise monitoring

M7.1 To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.

NOISE MONITORING POINT 8,10,13

Time Period	Measurement Parameter	Measurement Frequency	Sound Pressure Level $L_{Aeq\ 15minute}$
All	$L_{Aeq,\ 15minute}$	n/a	40

3.0 DESCRIPTION OF SITE ACTIVITIES

Site works identified during the audit included cutting, hammering and processing quarry product on Areas A, C, E/F *(Figure 1)*. Operating plant and equipment identified during the audit included:

- Saw cutting and hammering Area A/B
- Handling and transport stone blocks Area A/B
- Water pumps Area E
- Dozer ripping/extraction and pre screening for wash plant

Figure 1. Quarry Precinct Layout

4.0 OVERVIEW

The noise audit was undertaken between 7.00am and 9.30am, Wednesday 10 January 2024.

In accordance with the Approval Conditions noise measurements were conducted at three (3) reference residential locations shown in *Attachment 2*.

Location 1:	'Ibels' - 380 Somersby Falls Road
Location 2:	'McGregor' - 239 Grants Road
Location 3:	'Sammut' - 210 Grants Road

4.1 Measurement Instrumentation

The measurement instrumentation comprised a Svan 949 Sound and Vibration Analyzer. The meter was programmed to calculate and record 15 minute statistical levels. The reference calibration level of the meter was checked prior to and after the measurements with a Bruel & Kjaer Sound Level Calibrator Type 4230 and remained within ± 0.5dBA. The meter carried appropriate and current NATA calibration *(Attachment 3)*.

Measurements were undertaken in accordance with procedures documented in Australian Standard AS1055-1997 ' Acoustics - Description and Measurement of Environmental Noise' and the NSW Environmental Protection Authority, Industrial Noise Policy *(INP)* guidelines.

4.2 Weather Conditions

Weather observations and conditions reported at the onsite weather station (33.393004312°S, 151.266117075°E) during the audit, included light south-east to south-west breeze (1.4 - 1.5m/sec) and air temperature 18-20°C. No rain was reported during the audit.

4.3 Review of Noise Related Incidents

The Site Manager confirmed that a noise related incident was reported during the previous twelve (12) months. Investigations conducted by GRS concluded no details were provided in regard to the alleged noise source(s), day and time of the alleged incident or the location of the person(s) reporting the incident(s).

5.0 MEASUREMENT RESULTS

5.1 Off-site Measurement Results

Attended measurements during the audit where appropriate were used to assess source noise contributions associated with Grants Road Sand Quarry operations. A summary of the measurement results and calculated contributions is presented in *Table 1*. Birds and insects influenced measurements at all reference assessment locations.

Table 1: Audit Measurement Results

dBA re: 20 x 10^{-6} Pa

Measured Ambient Sound Pressure Levels dBA				Estimated Grants Road Sand Contribution	Comments
L_{Aeq}	L_{A10}	L_{A90}	L_{A1}	$L_{Aeq, 15min}$	
Location 1: Ibels Residence – 380 Somersby Falls Road					
41.9	39.0	34.1	52.0	<35	GRS truck onsite LAmax 40/1dBA: Saw cutting. Distant road traffic; Insects: Birds.
Location 2: McGregor Residence – 239 Grants Road					
44.6	42.9	36.8	57.1	<38	GRS truck on site LAmax 38/9dBA. Saw cutting; Birds; Insects; Distant road traffic
Location 3: Sammut Residence – 210 Grants Road					
39.4	42.0	35.4	60.0	<35	Distant road traffic; Birds; GRS not audible

5.2 Compliance Status

The results in *Table 1* demonstrate noise from Grants Road Sand Quarry activities complied with the DoPE (*Application Number 08_0099, MOD 1),* noise condition $L_{Aeq, 15min}$ 40dBA and EPA Environmental Protection Licence 11240 (dated 12 October 2021.

Table 2 presents a summary of the noise compliance status for the Grants Road Sand Quarry operations.

Table 2 – Noise Compliance Status

Unique ID	Compliance Requirement	Development Phase	Monitoring methodology	Evidence and comments
7	The Proponent must ensure that the construction and operational noise generated by the project does not exceed $L_{Aeq\ 15min}$ 40dBA at all privately owned residences	At all times	Daily onsite inspection of plant and equipment. Annual Noise Audit Acoustic Consultant	Annual Compliance Report from Acoustic Consultant

5.3 Noise Trends

A review of the measurement results *(Table 4)* and previous reported levels has shown that noise contributions from Grant Road Sand Quarry have remained steady.

Table 4 – Environmental Performance Summary

Environmental Aspect	Approval Criteria: Requirements in the management plan.	Summary of Monitoring Results in the Previous Reporting Period	Summary of Monitoring Results in this Reporting Period	Improvement Measures to be implemented
Noise	Schedule 3 Conditional 7 of the Approval	Location 1: <35dBA Location 2: <35dBA Location 3: <40dBA	Location 1: <35dBA Location 2: <36dBA Location 3: <35dBA	Extension of earth mounding, routine maintenance program, replacement of faulty noisy plant/equipment

5.4 Noise Mitigation Planning

Noise mitigation options planned for the next calendar year, include continue earth mounding/bunding on the southern site boundary. Additionally, and dependent on product demand, quarry varying working depths Areas A, B between 15-31 metres and continue ripping sandstone Area F.

6.0 CONCLUSION

Atkins Acoustics was retained by Grants Road Sand Pty Ltd to conduct an environmental noise audit for the Somersby Quarry.

The quarry currently operates under approval from the Department of Planning and Environment, Application number 08_0099. MOD 1, dated April 2018 and.

The noise audit was undertaken between 7.00am and 9.30am, Wednesday 10 January 2024.

The findings from the field measurement demonstrated noise from Grants Road Sand Quarry activities complied with the DoPE (*Application Number 08_0099, MOD 1),* noise condition $L_{Aeq,\ 15min}$ 40dBA and EPA Licence 11240 (dated 12 October 2021, Condition L4.

The Site Manager confirmed a noise related incident was reported during the previous assessment period. Follow-up investigations reported by GRS, concluded no details were provided in regard to the alleged noise source(s), day and time of the alleged incident or the location of the person(s) reporting the incident(s).

A review of the audit measurement results *(Table 1)* and previous reported audit measurements has shown that noise contributions from Grant Road Sand Quarry have remained steady.

Noise mitigation options planned for the next calendar year, include continue earth mounding/bunding on the southern site boundary. Additionally, and dependent on product demand, quarry varying working depths Areas A, B between 15-31 metres and continue ripping sandstone Area F.

ATKINS ACOUSTICS & ASSOCIATES PTY LTD.

ATTACHMENT 1: ENVIRONMENTAL PERFORMANCE & COMPLIANCE STATUS SUMMARY

ENVIRONMENTAL PERFORMANCE TABLE

Environmental Aspect	Approval Criteria	Summary of Monitoring Results in the Previous Monitoring Period	Summary of Monitoring Results in this Monitoring Period	Recommendations
Noise	The proponent shall ensure that the construction and operational noise generated by the project does not exceed $L_{Aeq\ 15min}$ 40 at any residence on privately-owned land	No exceedances	No exceedances	• Continue to undertake noise monitoring to determine whether the project is complying with the relevant conditions of Aaproval. • Maintain the effectiveness of noise suppression equipment on plant and equipment

COMPLIANCE STATUS TABLE

Schedule and Condition Number	Approval Criteria	Compliance	Evidence	Recommendations
Schedule 3 Condition L4	The proponent shall ensure that the construction and operational noise generated by the project does not exceed $L_{Aeq\ 15min}$ 40 at any residence on privately-owned land	Compliant	Attended annual noise audit	• Continue to undertake noise monitoring. • Continue onsite inspections of plant and equipment to ensure noise mitigations are operational and effective

ATTACHMENT 2: ASSESSMENT MONITORING LOCATIONS

(Reference Source: Six Maps)

ATTACHMENT 3: Svan Certificate of Calibration.

CERTIFICATE OF CALIBRATION

CERTIFICATE NO: SLM42569

EQUIPMENT TESTED: Sound & Vibration Analyzer

Manufacturer:	Svantek		
Type No:	Svan-949	**Serial No:**	9713
Mic. Type:	7052E	**Serial No:**	48484
Pre-Amp. Type:	SV12L	**Serial No:**	22940
Filter Type:	1/3 Octave	**Test No:**	FILT6765

Owner: Atkins Acoustics
21 Ernest Street
Hunters Hill NSW 2110

Tests Performed: IEC 651 & 804 (AS/NZS 1259-1990)
IEC 1260 (AS/NZS 4476-1997)

Comments: All tests passed for type 1. (See overleaf for details)

CONDITIONS OF TEST:

Ambient Pressure	1009	hPa ±1 hPa	**Date of Receipt :**	20/04/2022
Temperature	21	°C ±1° C	**Date of Calibration :**	22/04/2022
Relative Humidity	51	% ±5%	**Date of Issue :**	26/04/2022

Acu-Vib Test Procedure: AVP05 (SLM) & AVP06 (Filters)

CHECKED BY: ..... **AUTHORISED SIGNATURE:** .....

Jack Kielt

Accredited for compliance with ISO/IEC 17025 - Calibration
Results of the tests, calibration and/or measurements included in this document are traceable to SI units through reference equipment that has been calibrated by the Australian National Measurement Institute or other NATA accredited laboratories demonstrating traceability.

This report applies only to the item identified in the report and may not be reproduced in part.

The uncertainties quoted are calculated in accordance with the methods of the ISO Guide to the Uncertainty of Measurement and quoted at a coverage factor of 2 with a confidence interval of approximately 95%.

NATA
WORLD RECOGNISED ACCREDITATION
Accredited Lab No. 9262
Acoustic and Vibration Measurements

Acu-Vib Electronics
CALIBRATIONS SALES RENTALS REPAIRS

Head Office & Calibration Laboratory
Unit 14, 22 Hudson Ave. Castle Hill NSW 2154
(02) 9680 8133
www.acu-vib.com.au

Page 1 of 2 Calibration Certificate
AVCERT05.2 Rev.2.0 14/04/2021

Appendix 6
BASELINE AIR QUALITY MONITORING
Environmental Resources Management (ERM)

Compliance Monitoring Annual Report 2023

Grants Road Sand Quarry, 270 Grants Road, Somersby NSW 2250

PREPARED FOR
Grants Road Sand

DATE
12 February 2024

REFERENCE
0447733

DOCUMENT DETAILS

DOCUMENT TITLE	Compliance Monitoring Annual Report 2023
DOCUMENT SUBTITLE	Grants Road Sand Quarry, 270 Grants Road, Somersby NSW 2250
PROJECT NUMBER	0447733
Date	12 February 2024
Version	02 (Revised Final)
Author	Nathalie Tomson
Client name	Grants Road Sand

DOCUMENT HISTORY

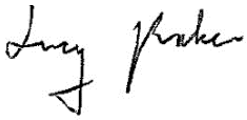
				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
DRAFT	1	Nathalie Tomson	Tania Haigh	Lucy Baker	24.01.2024	Draft for client comment
FINAL	1	Nathalie Tomson	Tania Haigh	Lucy Baker	02.02.2024	FINAL
FINAL	2	Nathalie Tomson	Tania Haigh	Lucy Baker	12.02.2024	Revised Final

SIGNATURE PAGE

Compliance Monitoring Annual Report 2023

Grants Road Sand Quarry, 270 Grants Road, Somersby NSW 2250

0447733



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Managing Consultant – Air Quality

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Partner

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Australia Pty Ltd
Level 14, 207 Kent Street
Sydney NSW 2000
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CONTENTS

LIST OF FIGURES IN APPENDICES

LIST OF TABLE IN APPENDICES

ACRONYMS AND ABBREVIATIONS

Acronyms	Description
Approved Methods	Approved methods for the sampling and analysis of air pollutants in NSW
EPA	(NSW) Environment Protection Authority
EPL	Environment Protection Licence
NEPM (AAQ)	National Environment Protection (Ambient Air Quality) Measure
ppb	parts per billion
ppm	parts per million
PM	(airborne) particulate matter
PM_{10}	airborne particulate matter with an aerodynamic diameter of less than 10 µm

$PM_{2.5}$	airborne particulate matter with an aerodynamic diameter of less than 2.5 µm
$\mu g/m^3$	micrograms per cubic metre

EXECUTIVE SUMMARY

As part of the Conditions of Approval issued on 25 July 2014 for the Grants Road Sand Quarry Extension, the proponent is required to monitor meteorological and dust parameters and report annually on the results and findings.

This report summarises the meteorological and dust parameters measured at the site from January to December 2023. Dust parameters measured were particulate matter (PM_{10}), deposited dust and respirable crystalline silica (RCS).

No exceedances of the air quality criteria for PM_{10} and deposited dust were measured during the 2023 reporting period. However, Grants Road received notification on 28 November 2023 of a high respirable crystalline silica (RCS) result from monitoring conducted 18 November 2023 relating to the bulldozer operator. Grants Road reported this to NSW Resource Regulator on the 28 November 2023 as this is a notifiable incident. There were no other incidents or complaints received. The data capture for all meteorological parameters was very low, possibly due to telemetry issues and faulty wind sensors.

1. INTRODUCTION

ERM Australia Pacific Pty Ltd (ERM) was engaged by Grants Road Sand to undertake the annual reporting for compliance monitoring at the Grants Road Sand Quarry, located on the NSW Central Coast at Somersby.

Dust and meteorological monitoring are required under the Project Approval issued in 2014. Monitoring is conducted using two dust deposition gauges, one high-volume sampler, and an automatic weather station (AWS). The required monitoring locations are shown in Figure A 1

The results of the monitoring programs are provided on an annual basis. This report summarises the data collected during the January to December 2023 period. The data has been reviewed to provide an evaluation of the suitability of the dust management processes employed at site by comparison of dust measurements with air quality criteria and review of any long-term trends.

All monitoring for air quality is conducted in accordance with the NSW Environment Protection Authority (EPA) "*Approved methods for the sampling and analysis of air pollutants in NSW"* (NSW EPA, 2022) (Approved Methods).

Specifically, the approved methods relevant to this monitoring plan are:

- AM-1 – Guide for the siting of sampling equipment;
- AM-2 – Guide for measurement of horizontal wind for air quality applications;
- AM-4 – Meteorological monitoring guidance for regulatory modelling applications;
- AM-18 – Particulate matter – PM_{10} – high volume sampler with size-selective inlet; and
- AM-19 – Particulates – deposited matter – gravimetric method.

AM-1 refers to the Australian Standard (AS) 2922 – 1987. A monitoring site for the meteorological station (met station) was chosen in accordance with AS 2923 – 1987. The location selected was away from buildings or other obstructions that would otherwise impact on the prevailing wind flow. AS 2922 has has been superseded by AS/NZS 3580.1.1:2016 Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment.

AM-2 refers to the AS 2923 – 1987 "Ambient Air – Guide for the Measurement of Horizontal Wind for Air Quality Applications". AS 2923 has now been superseded by AS/NZS 3580.14:2014 "Methods for sampling and analysis of ambient air Meteorological monitoring for ambient air quality monitoring applications".

2. PROJECT DETAILS

Project name	**Grants Road Sand Quarry Extension**
Application Number	08_0099
Address	270 Grants Road, Somersby NSW 2250 (Figure A 1)
Project Phase	Operational Compliance Report
Compliance Reporting Period	1 January 2023 to 31 December 2023
Project Activity Summary	Measurements for Respirable Crystalline Silica (RCS), PM_{10}, deposited dust and meteorological parameters have been analysed and reported consistent with requirements specified in the Project Approval, including the statement of commitments

3. COMPLIANCE STATUS SUMMARY

3.1 PROJECT APPROVAL ISSUED 25 JULY 2014

Unique ID	Compliance Requirement	Development Phase	Monitoring methodology	Evidence and comments
Schedule 3, Condition 10	Ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria at any residence on privately-owned land.	Operation	Dust deposition sampling and PM_{10} monitoring measurement as described in Section 1.	No exceedances in reporting period for PM_{10} or deposited dust.
Schedule 3, Condition 11, Part a	Implement best practice management to minimise the dust emissions of the project.	Operation	SMS alerts from on-site weather station when wind speeds are high. Operations are modified or ceased during these periods.	Grants Rd have advised there is remote access to the weather station and SMS alerts are configured, however a potential telemetry fault has been identified on 9 September 2023.
Schedule 3, Condition 11, Part b	Regularly assess air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval.	Operation	Dust deposition sampling, PM_{10} monitoring and meteorological measurement as described in Section 1.	Grants Rd have advised there is analysis of data throughout the year to ensure levels below short-term criteria and on track to remain below annual criteria.
Schedule 3, Condition 11, Part c	Minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events.	Operation	SMS alerts from the on-site weather station when winds are above certain speeds, as detailed in the Air Quality Management Plan.	Remote access to the weather station to enable SMS alerts. However, the low meteorological data capture (discussed below) indicates a lack of data checking throughout the year and a potential telemetry fault has been identified.
Schedule 3, Condition 11, Part f	Carry out regular air quality monitoring to determine whether the project is complying with the relevant conditions of this approval.	Operation	Dust deposition sampling, PM_{10} monitoring and meteorological measurement as described in Section 1.	No exceedances in reporting period for PM_{10} or deposited dust.

Unique ID	Compliance Requirement	Development Phase	Monitoring methodology	Evidence and comments
Schedule 3, Condition 13	For the life of the project, the Proponent must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	Operation	10 m meteorological mast installed at the site complying with all relevant methods listed in Section 1.	Data capture for all meteorological parameters were below the absolute minimum requirement for data completeness of 75% in 2023 (Peer Review Committee, 2001): 69% for temperature, 16% for rainfall and 6% for wind speed and direction. The data portal stopped receiving any meteorological data from 09 September 2023, suggesting a telemetry issue. The rain gauge that was not operating properly during 2022 was only replaced on 12 July 2023. Wind data was only available until 22 January 2023, suggesting an issue with the wind sensor.
Schedule 5, Condition 7	Immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested	Operation	PM_{10} monitoring as described in Section 1 and respirable crystalline silica (RCS) in accordance with Australian Standard (AS 2985-2009) - Workplace atmospheres - Method for sampling and gravimetric determination of respirable dust.	A high RCS result was reported from the bulldozer operator sampling. Grants Road Sand has advised that the NSW Resource Regulator was notified on 28 November 2023, i.e., same day of the reported high RCS exposure result (WEC, 2023b).

3.2 ENVIRONMENT PROTECTION LICENCE 11240

The facility operates under the Environment Protection Licence (EPL) 11240, which was reissued on 12 October 2021. In addition to monitoring currently conducted at the site, a requirement is included to monitor TSP using a high-volume sampler at Point 1 and evaluate the annual average concentration against a criterion of 90 µg/m^3. A review was conducted (ERM, 2022) to determine whether the addition of TSP would constitute a useful metric for the assessment of environmental performance of the Site. This review, based on analysis of PM_{10} monitoring at the site over seven years and a typical ratio of PM_{10} to TSP, concluded that if compliance with the annual average PM_{10} criterion is achieved, then the annual average TSP will also comply. On this basis, given that PM_{10} is currently monitored, TSP is not considered a useful metric for the evaluation of performance against air quality standards.

With the exception of TSP monitoring (discussed above), there are no instances of non-compliance with the EPL recorded during the 2023 reporting period. However, data capture for all meteorological parameters was low: 69% for temperature, 16% for rainfall and 6% for wind speed and direction. On 23 January 2024, ERM suggested Grants Road Sand to liaise with the data storage provider (Unidata Pty Ltd) to troubleshoot the weather station poor data capture.

4. PREVIOUS REPORT ACTIONS

The following actions were identified during preparation of the 2022 monitoring report:

- The rain gauge did not collect rainfall data during almost the entire 2022 reporting period, which was recommended to be investigated and rectified. The rain gauge was replaced on 12 July 2023; and
- The low data capture in 2022 for PM_{10} from the high-volume sampler was recommended to be reviewed, and if possible, action should be taken to prevent such a data loss in future reporting periods. The data capture in the 2023 reporting period was 93%, which shows that the issue has been resolved.

5. INCIDENTS

Respirable crystalline silica (RCS) is monitored to assess exposure of quarry workers to respirable crystalline silica as per the Schedule of Commitments within the Project Approval. A high RCS result was reported from the bulldozer operator sampling. Grants Road Sand has advised that the NSW Resource Regulator was notified on 28 November 2023 of the high RCS exposure result, and the contractor for the bulldozer (EarthMax) was sent instructions to promote compliance. Further details and discussions are presented in Section 7.2.3.

6. COMPLAINTS

No complaints arising from Grants Road Sand Quarry were received during the 2023 reporting period.

7. MONITORING DATA SUMMARIES

7.1 METEOROLOGY

Data capture for all meteorological parameters were low: 69% for temperature, 16% for rainfall and 6% for wind speed and direction. The data portal stopped receiving any meteorological data after 09 September 2023, suggesting a telemetry issue. Wind data was only available until 22 January 2023, suggesting an issue with the wind sensor. The rain gauge that was not operating properly during 2022 was replaced on 12 July 2023.

7.1.1 WIND DATA

Given the low data capture from the Grants Road AWS, data from the Bureau of Meteorology's (BoM) meteorological monitoring station at Gosford has been used to supplement the on-site monitoring. An annual wind rose of 2023 data from the BoM AWS at Gosford is presented in Figure A 2, and seasonal wind roses are presented in Figure A 3. The wind roses indicate that winds from the east, northeast and south are dominant in spring and summer, while autumn and winter present dominant winds from the west and northwest. The average wind speed for the period was 1.9 m/s and the percentage occurrence of calm wind conditions (less than or equal to 0.5 m/s) was 27.7% in the BoM AWS at Gosford.

Figure A 4 shows wind roses generated with the data available from the Grants Rd AWS (site station), i.e., 01 to 22 January 2023, and over the corresponding period from the BoM AWS station for comparison. The site station presented higher prevalence of northeast winds, lower average wind speed (1.8 versus 2.4 m/s) and much lower percentage occurrence of calm conditions (5.8% versus 20.2%) compared to the BoM station. These differences highlight the importance of maintaining an operating onsite weather station.

7.1.2 TEMPERATURE

Plots of the daily average temperature, recorded at the BoM AWS at Gosford and Grants Rd AWS at 2 m and 10 m are shown in Figure A 5. Visual analysis indicates that a positive strong correlation exists between temperatures recorded by the Grants Rd AWS and the BoM AWS. The maximum daily average of 28.7°C was recorded on both 06 March and 14 December 2023. The monthly average temperature is shown in Table A 2. June was the coldest recorded month on average and December was the hottest month on average.

7.1.3 RAINFALL

As previously mentioned, the Grants Road rainfall sensor was identified to be faulty in 2022 and was replaced on 12 July 2023. However, as the online portal stopped receiving meteorological data on 09 September 2023, approximately 2-months of rain data only is available from the Grants Road AWS. During that time, the site station recorded a total of 81.2 mm. The Bureau of Meteorology's (BoM) AWS at Gosford, 8.2 km southwest of the site, recorded a total of 857.20 mm rainfall in 2023.

Plots of the daily total rainfall from the BoM AWS at Gosford and from the Grants Road AWS are shown in Figure A 6 and the total monthly rainfall is shown in Figure A 7.

7.2 AIR QUALITY

The NSW EPA specifies air quality assessment criteria relevant for assessing impacts from air pollution in the *Approved Methods for the Modelling and Assessment of Pollutants in New South Wales* (NSW EPA, 2022) (Approved Methods). These criteria are health-based (i.e. they are set at levels to reduce the risk of adverse health effects). The EPA criteria are consistent with the National Environment Protection Measures for Ambient Air Quality (referred to as the Air NEPM) (NEPC, 2021). The assessment criteria for annual average PM_{10} have reduced from 30 µg/m^3 to 25 µg/m^3 in recent years in both of these sources.

Air concentration limits are also specified in EPL 11240 that must be met at the monitoring locations.

Table A 3 and Table A 4 summarise the air quality criteria for concentrations of particulate matter and deposited dust levels that are relevant to this study. Where multiple criteria are listed, the more stringent is adopted to assess compliance in this report.

7.2.1 PARTICULATE MATTER (PM_{10})

The results for the available PM_{10} data are presented in Figure A 8. Of a possible 60 samples (over approximately 12 months), fifty-six (56) samples are reported, resulting in a data recovery of approximately 93%. For reference, this data capture is below the recommended 95% but above the absolute minimum of 75% for data completeness for averaging purposes specified for reporting under the National Environment Protection Measure for Ambient Air Quality (Peer Review Committee, 2001).

The average PM_{10} concentration over the recorded 12-month period was 5.1 µg/m^3. All reported results are below the EPA maximum 24-hour average criterion of 50 µg/m^3 for PM_{10}.

The dust sample collected by the HVAS monitor includes both dust generated by site activities (incremental dust impact) and dust from all other local sources (background dust levels). However as stated previously, even with the background levels accounted for, PM_{10} levels are considerably below their respective 24-hour and annual criterion.

Annual average PM_{10} concentrations for 2016 to 2023 are shown in Table A 5 and Figure A 9. Figure A 10 presents the individual monitoring results from 2016 to 2023. It can be seen that the average PM_{10} concentration increased from 2017 to 2019 after which it has remained relatively low. The increase in concentrations from 2017 to 2019 and reduction in 2020 is seen across NSW. The highest concentrations in 2019, including the exceedance day experienced in December 2019, were due to drought and bushfire conditions across the region and is explained in the 2019 Annual Report.

7.2.2 DUST DEPOSITION

Dust deposition is measured at two locations, R1 and R4, as shown in Figure A 1. The results for the available dust deposition data are presented in Figure A 11. In 2023, all 12 months of monitoring data were available for inclusion in this report. The annual average monthly dust deposition level (insoluble solids) for the period of 2023 was 0.3 g/m^2/month at R1 and 0.2 g/m^2/month at R4. The results are well below the EPA cumulative annual average criterion of 4 g/m^2/month. A maximum value of 0.9 g/m^2/month was recorded in November at R1.

The dust sample collected by the deposition gauges includes both dust generated by site activities (incremental dust impact) and dust from all other local sources (background dust levels). Even with the background levels accounted for, the annual average deposition levels are considerably below both the incremental and cumulative annual criteria.

Annual average dust deposition levels at R1 and R4 from 2017 to 2023 are shown in Table A 6 and Figure A 12

Monthly dust deposition measurements at R1 and R4 from January 2017 to December 2023 are shown in Figure A 13.

7.2.3 RESPIRABLE CRYSTALLINE SILICA

Results of respirable crystalline silica measurements taken on 15 June 2023 (quarter 2 – Q2), 18 October 2023 (Q3) and 7 December 2023 (Q4) were provided to ERM. The samples were measured over the course of a shift, using personal air-samplers in the breathing zone of operators on dozers, excavators and loaders at the site. The results collected are corrected for the number of hours worked in a shift. These are presented in reports by WorkPlace Environment Consultants (WEC, 2023a, 2023b, 2023c) and are summarised in Figure 7-1, Figure 7-2 and Figure 7-3 below.

Levels were below the relevant workplace health and safety standards in the Q2 and Q4 monitoring events. In the Q3 monitoring exercise, the RCS level sampled with the bulldozer operator was above the standard, which is a notifiable event to NSW Resources Regulator. Grants Road Sand has advised that the NSW Resource Regulator was notified on 28 November 2023 of the high RCS exposure result. Grants Rd has also supplied the contractor for the bulldozer (EarthMax) with instructions to promote compliance. These included ensuring that the dozer operator made use of appropriate respiratory protection, investigating cabin seals and ventilation, and conducting additional monitoring within two months to demonstrate compliance in order to continue operating at the site.

FIGURE 7-1 Q2 CRYSTALLINE SILICA MEASUREMENT RESULTS SUMMARY (WEC, 2023A)

Job	Test	Time	Result	Standards
Excavator Operator Single blade Xander	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 15 Jun 2023	<0.013 mg/m^3 0.004 mg/m^3 0.364 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Loader Operator Beejay	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 15 Jun 2023	<0.013 mg/m^3 <0.002 mg/m^3 0.135 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Wash Plant Loader Murray Jones	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 15 Jun 2023	0.160 mg/m^3 <0.003 mg/m^3 1.019 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Telehandler Operator Joseph Tregellis	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 15 Jun 2023	<0.013 mg/m^3 <0.002 mg/m^3 0.121 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Bulldozer	respirable dust respirable silica inhalable dust	Not operating	- - -	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Comments Operators carried 2 samplers – one for respirable dust – the other for inhalable dust NSW Resources Regulator requires notification of high dust exposure results An occupational hygiene technician was at the quarry during the test period. Light winds, no rain during the test period, last rains 1.2 mm on 14 Jun (Mangrove Mountain)				

FIGURE 7-2 Q3 CRYSTALLINE SILICA MEASUREMENT RESULTS SUMMARY (WEC, 2023B)

Job	Test	Time	Result	Standards
Bulldozer Operator Jimmy Liddle	respirable dust respirable silica inhalable dust	7:03 - 15:15 8:12 hours 18 Oct 2023	0.374 mg/m^3 **0.249 mg/m^3** 1.585 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Cat D10R – Ripping all day			
Excavator Operator Cutting wheel Xander Patterson	respirable dust respirable silica inhalable dust	6:55 - 15:10 8:15 hours 18 Oct 2023	<0.013 mg/m^3 <0.004 mg/m^3 1.419 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Cat – Single-blade cutting wheel			
Telehandler Operator Joseph Tregellis	respirable dust respirable silica inhalable dust	7:07 - 15:30 8:23 hours 18 Oct 2023	<0.014 mg/m^3 <0.005 mg/m^3 0.099 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Loading trucks			
Comments Monitoring in accordance with *Work Health and Safety Regulations 2017*, Clause 50(1) NSW Resources Regulator requires notification of high results. Our licence for sampling airborne dust was MLA 0017521 Cabin seals and ventilation at the bulldozer should be investigated Use of respiratory protection by the bulldozer operator is required. Respirators should be well-fitted, rated P1 or P2 or P3, & have the *StandardsMark* from SAI Global. An occupational hygiene technician was at the quarry for most of the test period, including the start & finish Light winds, no rain during the test period, last rain 0.2 mm on 17 Oct (Mangrove Mountain)				

FIGURE 7-3 Q4 CRYSTALLINE SILICA MEASUREMENT RESULTS SUMMARY (WEC, 2023C)

Job	Test	Time	Result	Standards
Loader Operator Jeremy Boom	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 7 Dec 2023	0.112 mg/m^3 <0.009 mg/m^3 0.522 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Cat 972G – Loading trucks – Feeding wash plant			
Loader Operator Sonny Vaka	respirable dust respirable silica inhalable dust	7:00 - 15:15 8:15 hours 7 Dec 2023	0.037 mg/m^3 <0.009 mg/m^3 0.144 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Cat 980 – Loading trucks			
Excavator Operator Cutting wheel Rhys Baldwin	respirable dust respirable silica inhalable dust	7:00 - 15:10 8:10 hours 7 Dec 2023	0.075 mg/m^3 0.019 mg/m^3 0.817 mg/m^3	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
	Triple wheel – Marking up – Moving hoses			
Bulldozer	respirable dust respirable silica inhalable dust	Not operating	- - -	2.100 mg/m^3 (10-hour) 0.035 mg/m^3 (10-hour) 7.000 mg/m^3 (10-hour)
Comments Monitoring in accordance with *Work Health and Safety Regulations 2017*, Clause 50(1) NSW Resources Regulator requires notification of high results. Our licence for sampling airborne dust was MLA 0017521 Based on these results, no additional engineering controls were required for these operators. Use of respiratory protection is recommended during dusty work Respirators should be well-fitted, rated P1 or P2 or P3, & have the *StandardsMark* from SAI Global. An occupational hygiene technician was at the quarry for the start & finish of the test period Light winds, last rains 2.2 mm on 4 Dec and 12.6 mm on 2 Dec (Mangrove Mountain)				

8. CONCLUSION

As part of the Conditions of Approval issued on 25 July 2014 for the Grants Road Sand Quarry Extension and EPL 11240, the proponent is required to monitor meteorological and dust parameters. This report summarises the monitoring results for 2023.

In terms of dust monitoring, particulate matter (PM_{10}), deposited dust and respirable crystalline silica (RCS) were measured during the reporting period. Measured levels of PM_{10} and deposited dust were below the criteria specified in the Project Approval and EPL 11240. A high respirable crystalline silica (RCS) result was reported from the bulldozer operator sampling, which is a notifiable incident to the NSW Resources Regulator. There were no other reported incidents or complaints received. TSP was not measured as per EPL 11240, however, this is not considered a useful metric to incorporate into the monitoring program. Compliance with metrics for PM_{10} indicates compliance with TSP air quality criteria.

Data capture for all meteorological parameters were below the absolute minimum requirement for data completeness of 75%; they were 69% for temperature, 16% for rainfall and 6% for wind speed and direction. This is likely due to a combination of factors, including a potential telemetry issue that prevented uploading of meteorological parameters from September onwards, and a possible faulty wind sensor. These issues should be investigated and rectified. It is recommended that AWS data is checked regularly throughout the year to identify any faults.

9. LIMITATIONS

1. This report is based solely on the scope of work described in proposal 'P0708561 Grants Rd Sand_Proposal for 2023 Air Quality Review.pdf' performed by Environmental Resources Management Australia Pacific Pty Ltd (**ERM**) for Grants Road Sand (the **Client**). The Scope of Work was governed by a contract between ERM and the Client (**Contract**).
2. No limitation, qualification or caveat set out below is intended to derogate from the rights and obligations of ERM and the Client under the Contract.
3. The findings of this report are solely based on, and the information provided in this report is strictly limited to that required by, the Scope of Work. Except to the extent stated otherwise, in preparing this report ERM has not considered any question, nor provides any information, beyond that required by the Scope of Work.
4. This report was prepared between December 2022 and January 2023 and is based on conditions encountered and information reviewed at the time of preparation. The report does not, and cannot, take into account changes in law, factual circumstances, applicable regulatory instruments or any other future matter. ERM does not, and will not, provide any on-going advice on the impact of any future matters unless it has agreed with the Client to amend the Scope of Work or has entered into a new engagement to provide a further report.
5. This report is based on analyses described in the report, and information provided by the Client or third parties (including regulatory agencies). All conclusions and recommendations made in the report are the professional opinions of the ERM personnel involved. Whilst normal checking of data accuracy was undertaken, except to the extent expressly set out in this report ERM:
    a. did not, nor was able to, make further enquiries to assess the reliability of the information or independently verify information provided by;
    b. assumes no responsibility or liability for errors in data obtained from, the Client, any third parties or external sources (including regulatory agencies).
6. Although the data that has been used in compiling this report is generally based on actual circumstances, if the report refers to hypothetical examples those examples may, or may not, represent actual existing circumstances.
7. Only the environmental conditions and or potential contaminants specifically referred to in this report have been considered. To the extent permitted by law and except as is specifically stated in this report, ERM makes no warranty or representation about:
    a. the suitability of the site(s) for any purpose or the permissibility of any use;
    b. the presence, absence or otherwise of any environmental conditions or contaminants at the site(s) or elsewhere; or
    c. the presence, absence or otherwise of asbestos, asbestos containing materials or any hazardous materials on the site(s).

8. Use of the site for any purpose may require planning and other approvals and, in some cases, environmental regulator and accredited site auditor approvals. ERM offers no opinion as to the likelihood of obtaining any such approvals, or the conditions and obligations which such approvals may impose, which may include the requirement for additional environment works.
9. The ongoing use of the site or use of the site for a different purpose may require the management of or remediation of site conditions, such as contamination and other conditions, including but not limited to conditions referred to in this report.
10. This report should be read in full and no excerpts are to be taken as representative of the whole report. To ensure its contextual integrity, the report is not to be copied, distributed or referred to in part only. No responsibility or liability is accepted by ERM for use of any part of this report in any other context.
11. Except to the extent that ERM has agreed otherwise with the Client in the Scope of Work or the Contract, this report:
    a. has been prepared and is intended only for the exclusive use of the Client and the appointed contaminated land auditor;
    b. must not to be relied upon or used by any other party;
    c. has not been prepared nor is intended for the purpose of advertising, sales, promoting or endorsing any Client interests including raising investment capital, recommending investment decisions, or other publicity purposes;
    d. does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in or in relation to the site(s); and
    e. does not purport to provide, nor should be construed as, legal advice.

10. REFERENCES

Australian Standard / New Zealand Standard (2014). Methods for sampling and analysis of ambient air Meteorological monitoring for ambient air quality monitoring applications. 3580.14:2014

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WEC (2023c). "*Exposure to Dust & Crystalline Silica Dust (Q4) (Dec 2023), Grants Rd Sand*", report prepared by WorkPlace Environment Consultants, 19 December 2023.

APPENDIX A FIGURES & TABLES

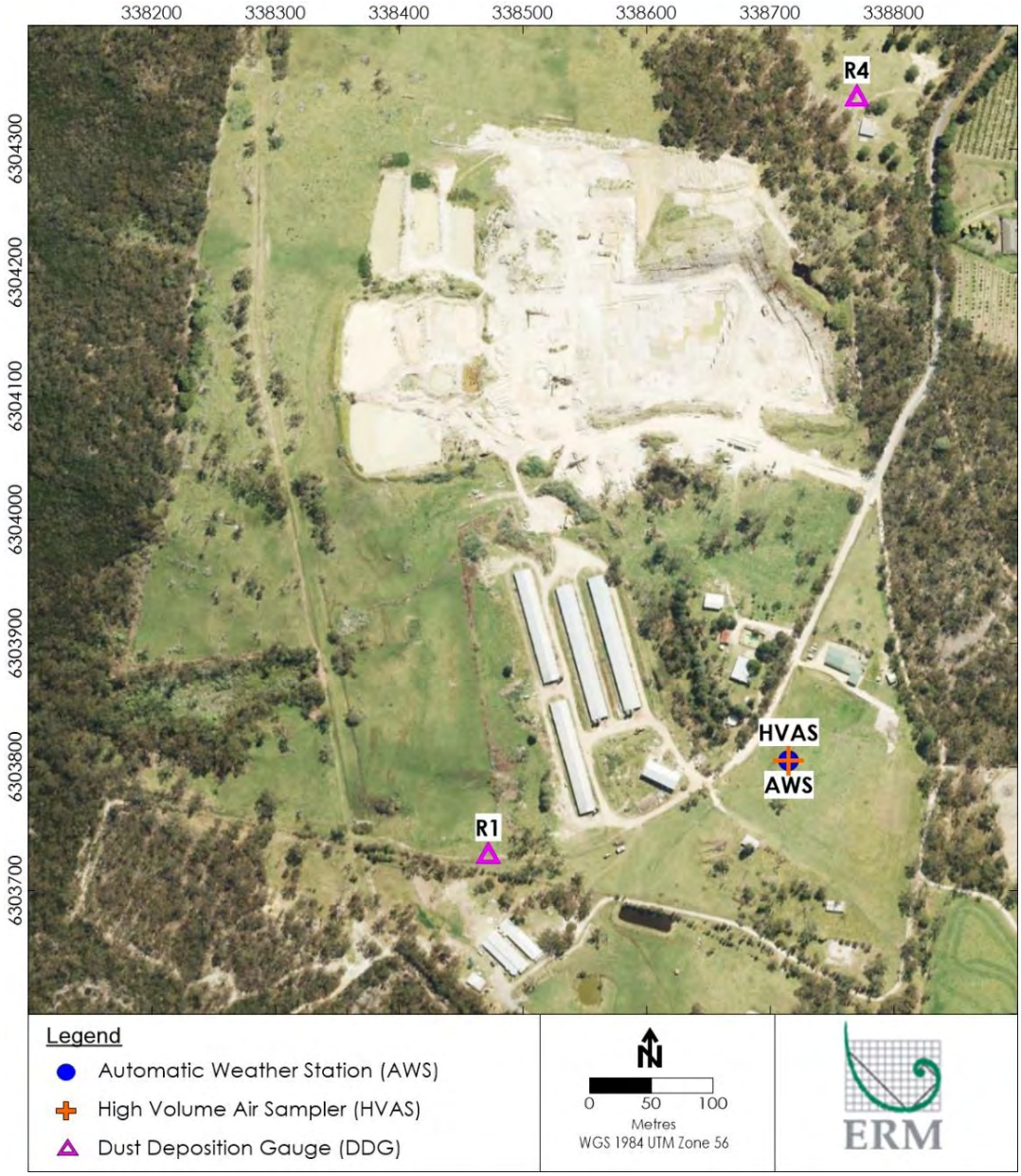
TABLE A 1: WEATHER STATION PARAMETERS

Parameter	Unit	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	10-Minute	AM-4
Temperature	°C			AM-4
Temperature @ 10m	°C			AM-2 and AM-4
Wind Speed @ 10m	m/s			AM-2 and AM-4
Wind Direction @ 10m	Degrees			AM-2 and AM-4
Sigma Theta	Degrees			AM-2 and AM-4
Relative Humidity	%			AM-4
Solar Radiation	W/m2			AM-4

MONITORING LOCATIONS

The Grants Road Sand Quarry compliance monitoring locations are shown in Figure A 1 Featured are the AWS, the HVAS and two dust deposition gauges (R1 and R4). The HVAS is located at the southeast corner of the site and is co-located with the AWS. One of the dust deposition gauges is located on the southern boundary between the operations and the nearest southern residence. The second gauge is located on the northeast corner of the site where the nearest northern residences are.

FIGURE A 1 MONITORING LOCATIONS AT GRANTS ROAD QUARRY



METEOROLOGICAL MONITORING

Wind Data

FIGURE A 2 BUREAU OF METEOROLOGY'S GOSFORD AWS WIND ROSE, 2023

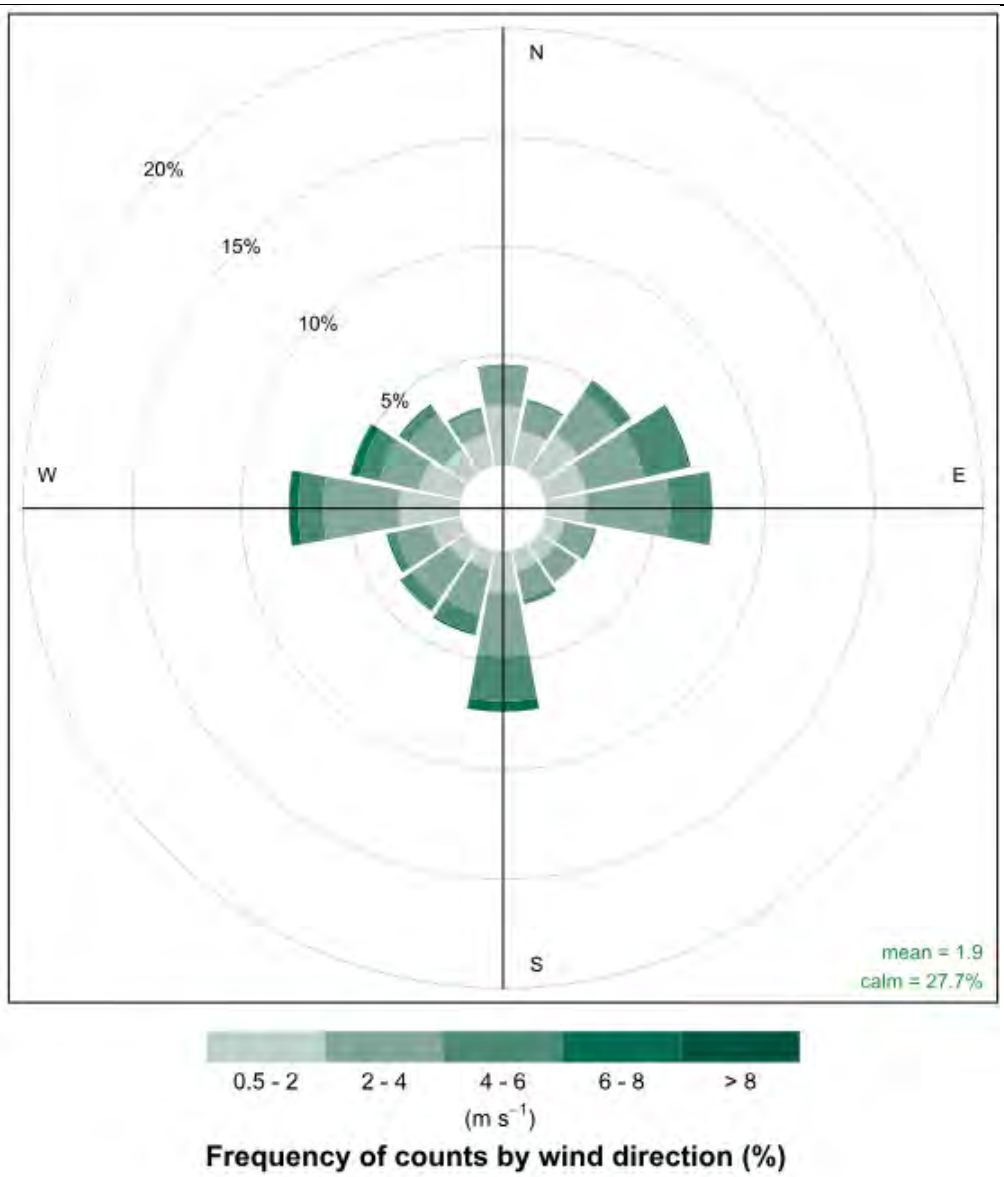


FIGURE A 3 BUREAU OF METEOROLOGY'S GOSFORD AWS SEASONAL WIND ROSE, 2023

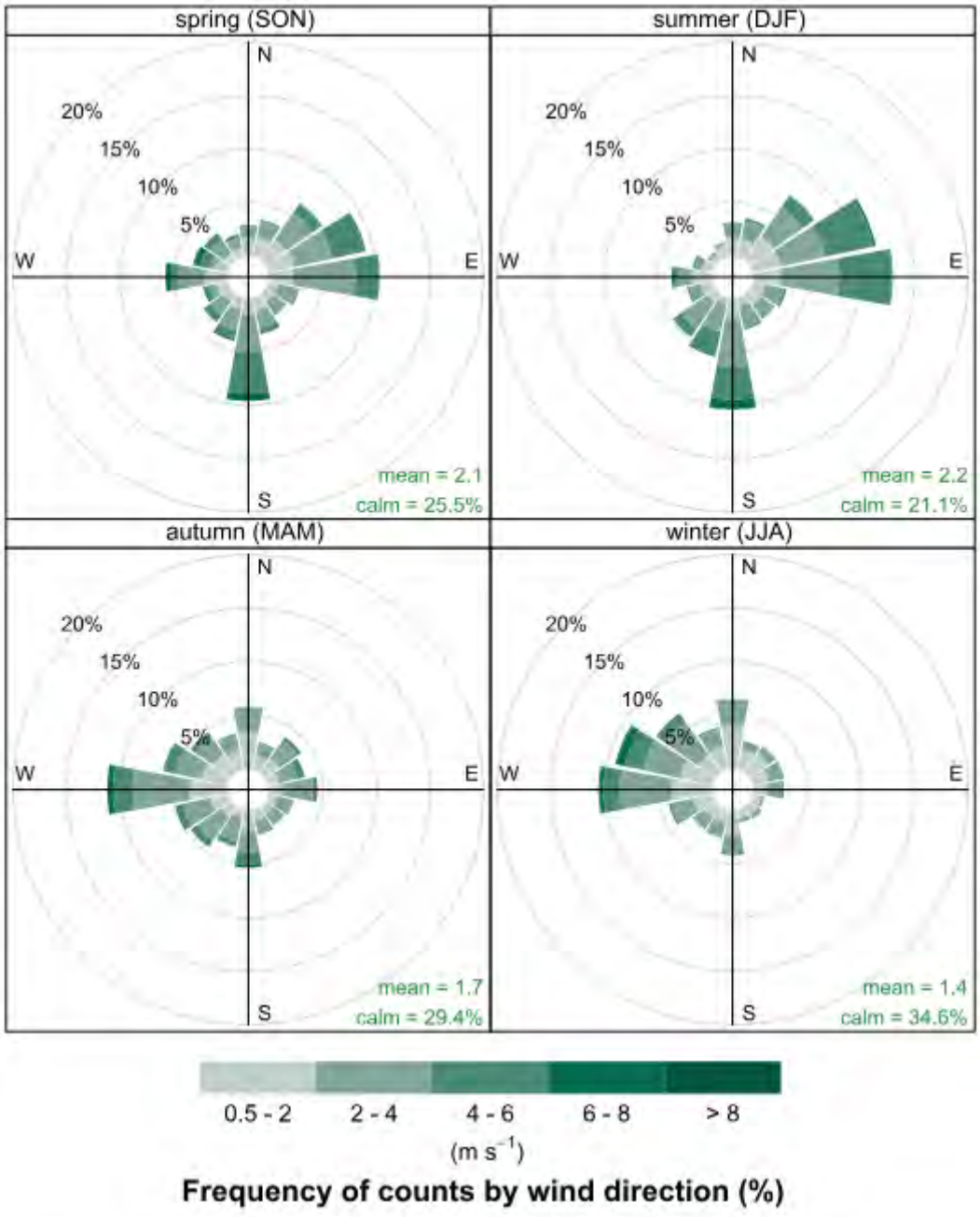
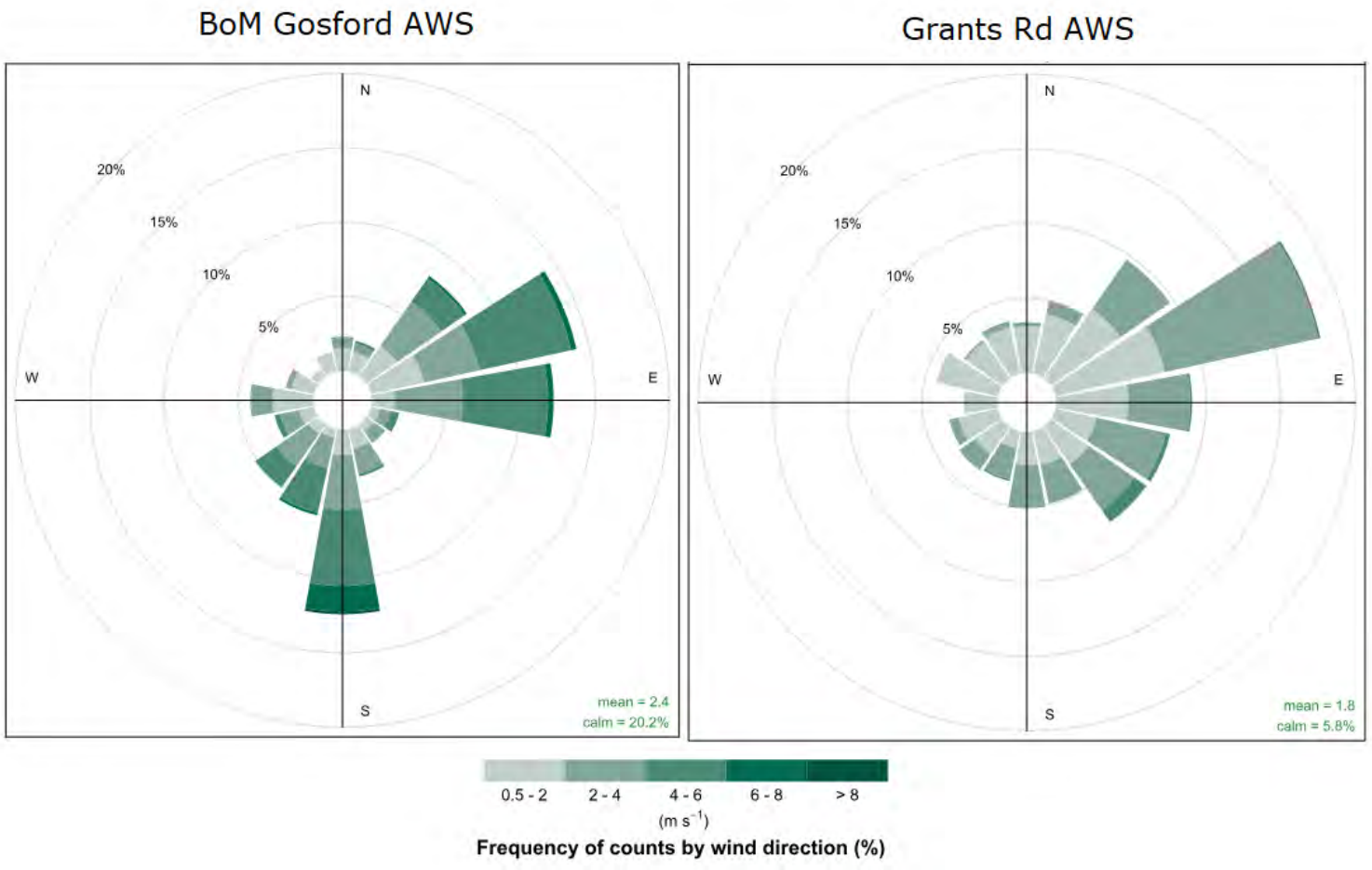


FIGURE A 4 BUREAU OF METEOROLOGY'S GOSFORD AWS AND GRANTS RD AWS WIND ROSES WITH 01 TO 22 JANUARY 2023 DATA



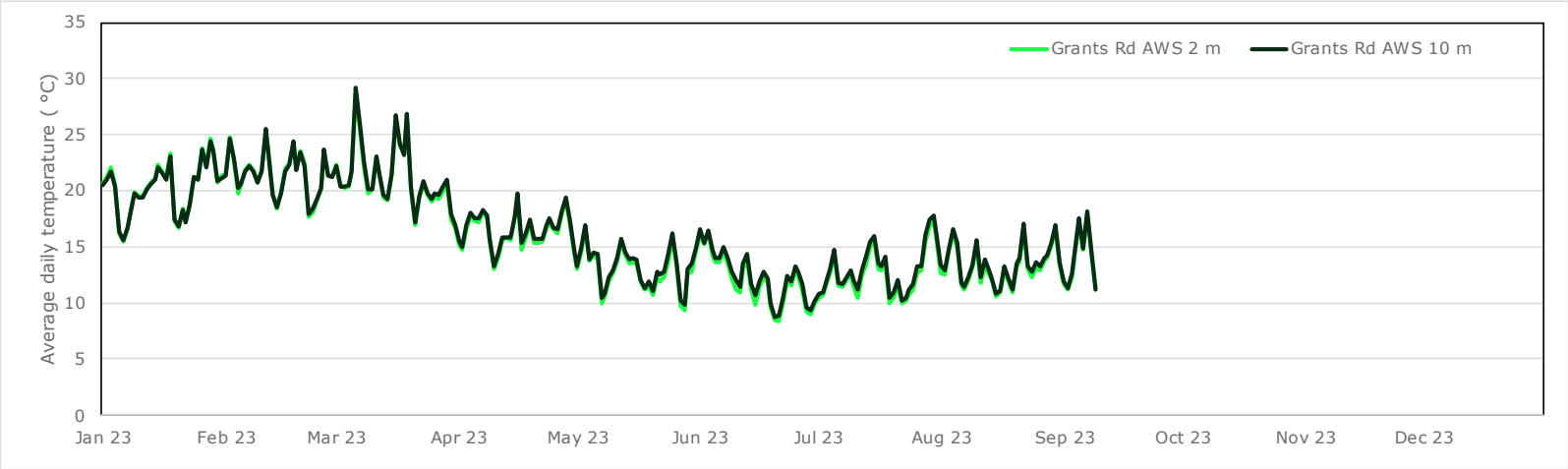
Temperature

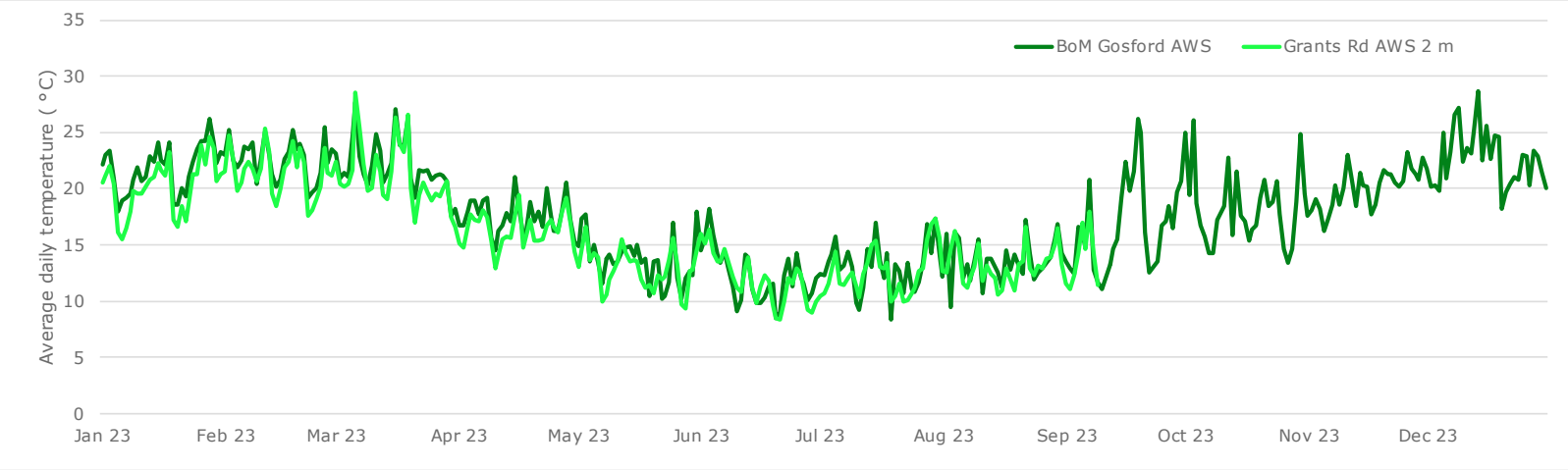
TABLE A 2: MONTHLY AVERAGE TEMPERATURE, 2023

Month	BoM Gosford AWS (°C)	Grants Rd AWS at 10 m (°C)	Grants Rd AWS at 2 m (°C)
January	21.79	20.14	20.22
February	22.62	21.50	21.50
March	22.11	21.33	21.13
April	17.55	16.59	16.32
May	13.61	13.22	12.84
June	12.23	12.40	11.97
July	13.04	12.98	12.56
August	13.56	13.50	13.16
September	16.40	14.17*	13.92*
October	18.34		
November	20.04		
December	22.66		

Table note:
* Data not available after 9 September due to potential telemetry issue.

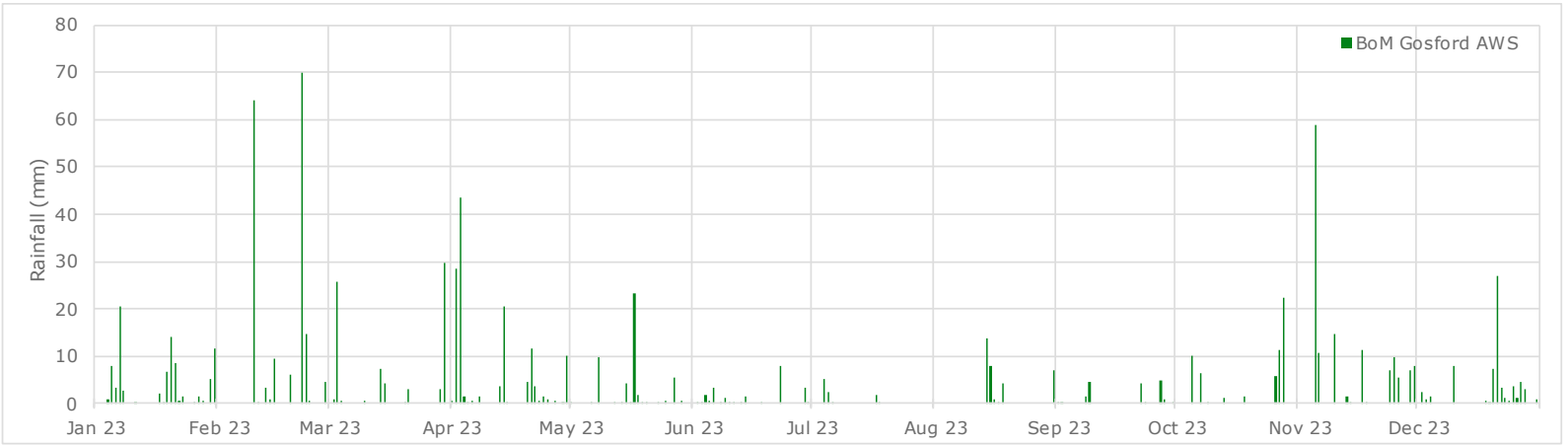
FIGURE A 5 AVERAGE DAILY TEMPERATURE, 2023





Rainfall

FIGURE A 6 DAILY RAINFALL FROM THE BUREAU OF METEOROLOGY'S GOSFORD AWS AND GRANTS RD AWS FOR 2023



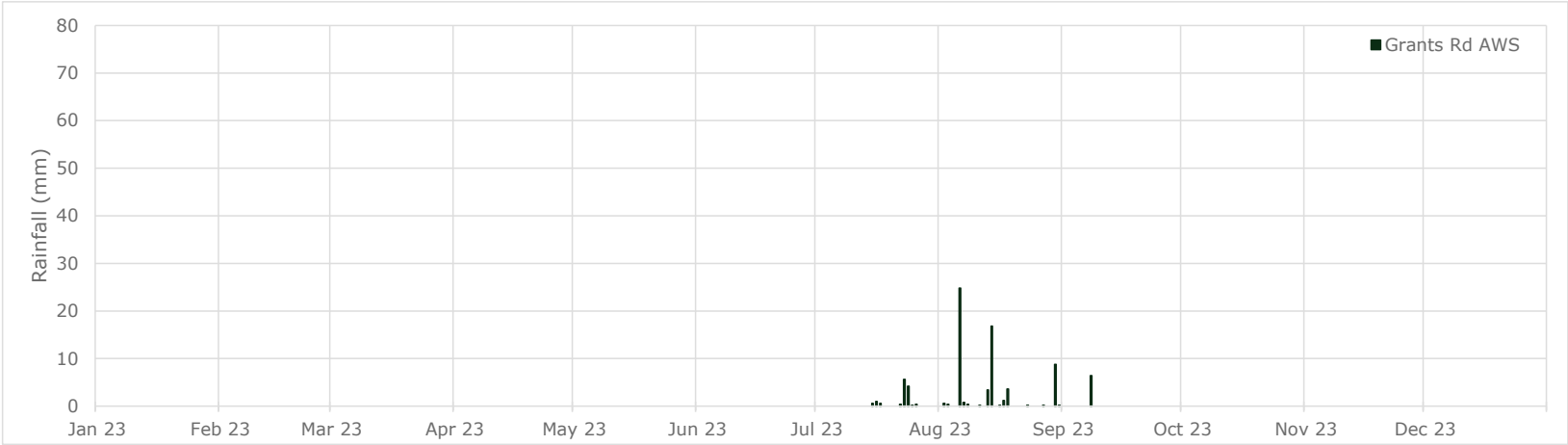
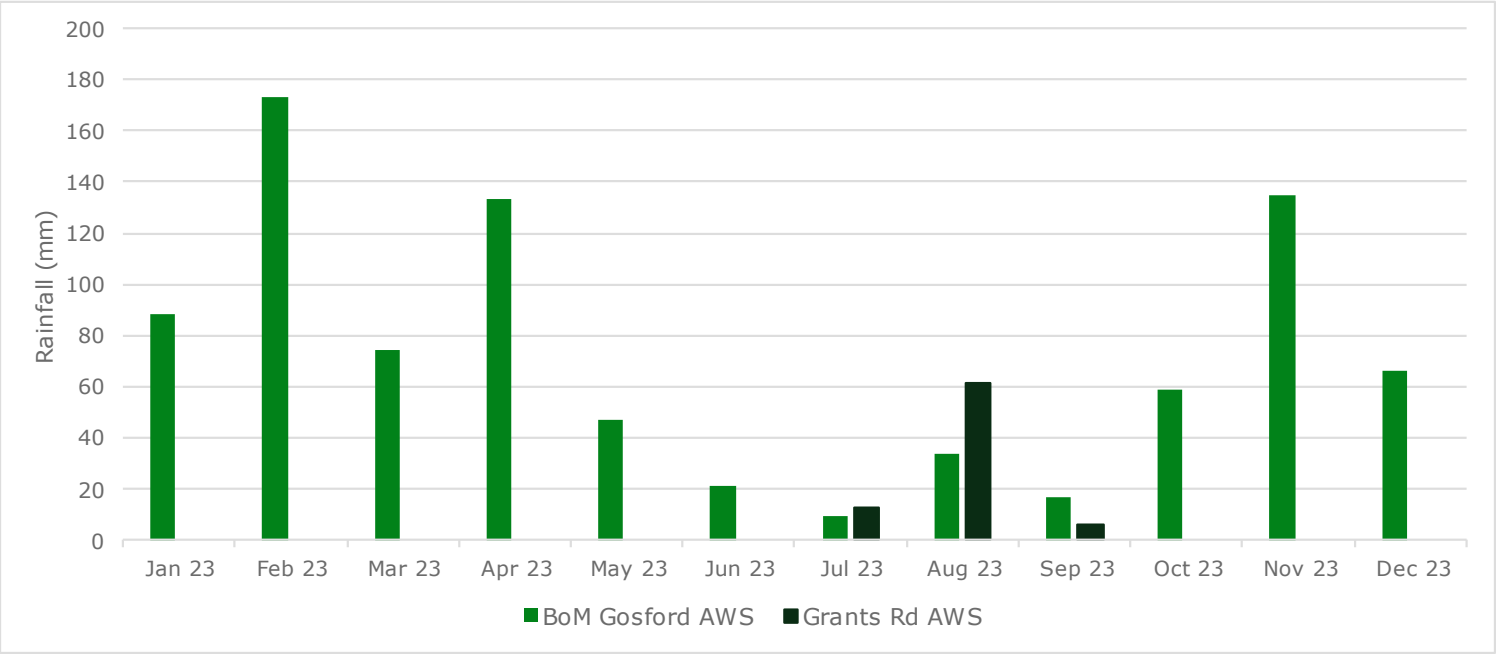


FIGURE A 7 MONTHLY TOTAL RAINFALL FROM THE BUREAU OF METEOROLOGY'S GOSFORD AWS AND GRANTS RD AWS FOR 2023



AIR QUALITY

The NSW EPA specifies air quality assessment criteria relevant for assessing impacts from air pollution in the *Approved Methods for the Modelling and Assessment of Pollutants in New South Wales* (NSW EPA, 2022) (Approved Methods). These criteria are health-based (i.e. they are set at levels to reduce the risk of adverse health effects). The EPA criteria are consistent with the National Environment Protection Measures for Ambient Air Quality (referred to as the Air NEPM) (NEPC, 2021). The assessment criteria for annual average PM_{10} has reduced from 30 µg/m^3 to 25 µg/m^3 in recent years in both of these sources.

Table A 3 and Table A 4 summarise the air quality criteria for concentrations of particulate matter and deposited dust levels that are relevant to this study. Where multiple criteria are listed, the more stringent is adopted to assess compliance.

TABLE A 3: AIR QUALITY STANDARDS / GOALS FOR PARTICULATE MATTER

Pollutant	Averaging Period	Standard / Goal	Source
Particulate matter with an equivalent aerodynamic diameter less than 10 µm (PM_{10})	24-hour maximum	50 µg/m^3	Air NEPM Approved Methods EPL 11240
	Annual mean	25 µg/m^3	Air NEPM Approved Methods
		30 µg/m^3	EPL 11240

Notes: µg/m^3 – micrograms per cubic metre, µm – micrometre.

TABLE A 4: AIR QUALITY STANDARDS / GOALS FOR DEPOSITED DUST

Pollutant	Averaging Period	Standard / Goal	Source
Deposited dust (insoluble solids)	Annual mean	2 g/m^2/month (Incremental)	Approved Methods EPL 11240
	Annual mean	4 g/m^2/month (Cumulative)	Approved Methods EPL 11240

Notes: g/m^2/month – grams per metre square per month.

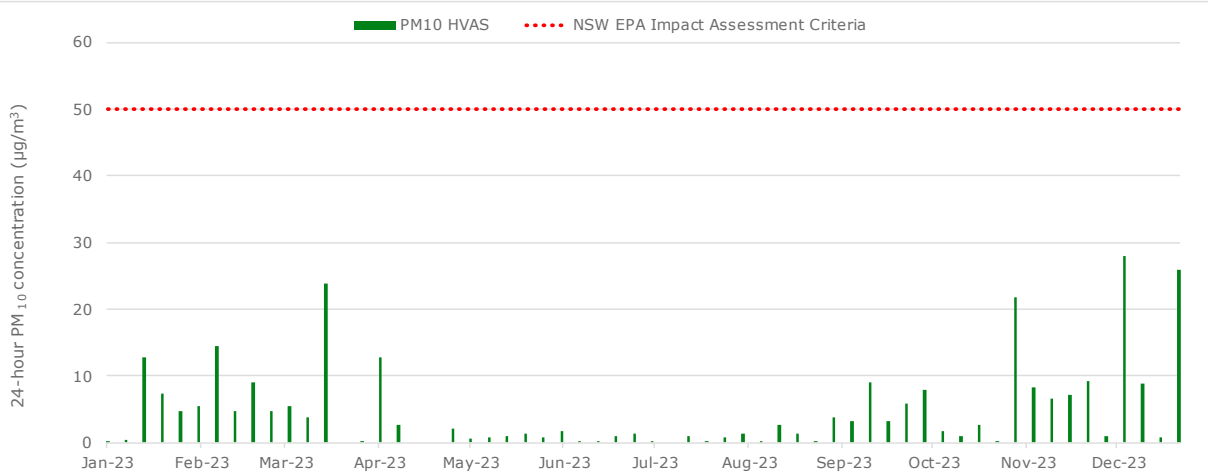
Respirable crystalline silica measurements have been evaluated by comparison with OH&S criteria (Section 7.2.3). This follows from the statement of commitments in the Project Approval which included the measurement of respirable crystalline silica using personal air-samplers on personnel working on-site; refer to excerpt below:

"*Carry out campaign monitoring for respirable crystalline silica. The monitoring would assess the exposure of quarry workers to respirable crystalline silica (in accordance with*

*Australian Standard (AS 2985-2009) - Workplace atmospheres - Method for sampling and gravimetric determination of respirable dust."*Particulate Matter (PM_{10})

Measured Results

FIGURE A 8 HVAS MONITORING RESULTS FOR PM_{10}, 2023



Comparison to the environmental assessment predictions

The Air Quality Assessment (AQA) for the Grants Road Sand Quarry Extension was completed by PAEHolmes in 2013, Air Quality Impact Assessment – Extension of Grants Road Quarry (PAEHolmes, 2013). The cumulative results predicted in the assessment indicate that the 24-hour PM_{10} ground level concentrations at the current location of the HVAS would be in the order of 70 µg/m^3. The highest measured cumulative 24-hour PM_{10} concentration was 28 µg/m^3 in 2023, a value considerably lower than the conservative predictions made in the air quality assessment (less than 50% of the predicted concentration). Data capture for 2023 was 93%, a significant improvement compared to the 16% for 2022.

The predicted annual average PM_{10} concentration in the AQA was approximately 30 µg/m^3 at the HVAS location. The average of available data in 2023 is 5.1 µg/m^3. This is consistent with the 24-hour results in that the concentration measured by the HVAS is also less than 50% of the predicted concentration at the same location.

Given the results of the data during the monitoring period, currently no additional action is required to control environmental performance. Rather it is recommended that current mitigation processes are sustained.

Trend analysis for PM_{10}

HVAS PM_{10} monitoring results have been gathered from January 2016 to December 2023. Table A 5 and Figure A 9 present the annual average PM_{10} concentrations from 2016 to 2023. Figure A 10 presents the individual monitoring results from 2016 to 2023.

PM_{10} concentrations were increasing from 2017 to 2019 after which they remain relatively low. The increase in concentrations from 2017 to 2019 and reduction in 2020 is seen across NSW. The highest concentrations in 2019, including the exceedance day experienced in December 2019, were due to drought and bushfire conditions across the region and is explained in the 2019 Annual Report.

TABLE A 5: ANNUAL AVERAGE PM_{10} CONCENTRATIONS FROM HVAS FROM 2016 TO 2023

Year	Annual average PM_{10} concentrations (µg/m³)
2016	9.1
2017	7.2
2018	9.4
2019	14.8
2020 [a]	4.3
2021	3.9
2022 [b]	3.6
2023	5.1

Notes:
a Only 9 months of data captured in 2020.
b Only 2 months of data captured in 2022.

FIGURE A 9 ANNUAL AVERAGE PM_{10} CONCENTRATIONS FROM HVAS FOR 2016 TO 2023

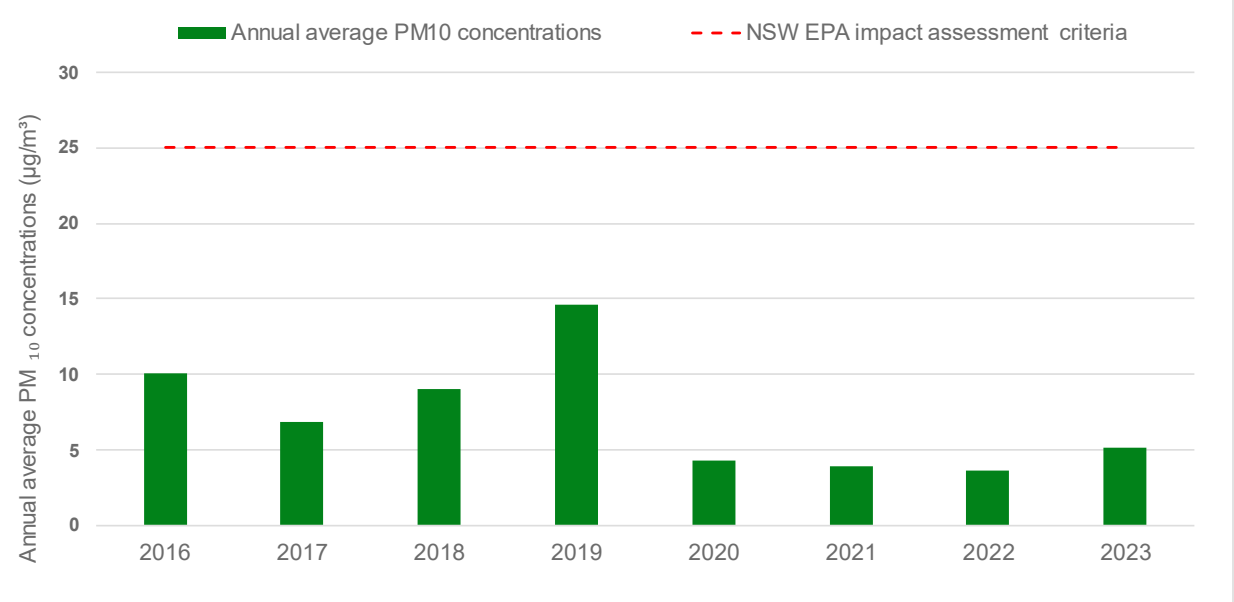
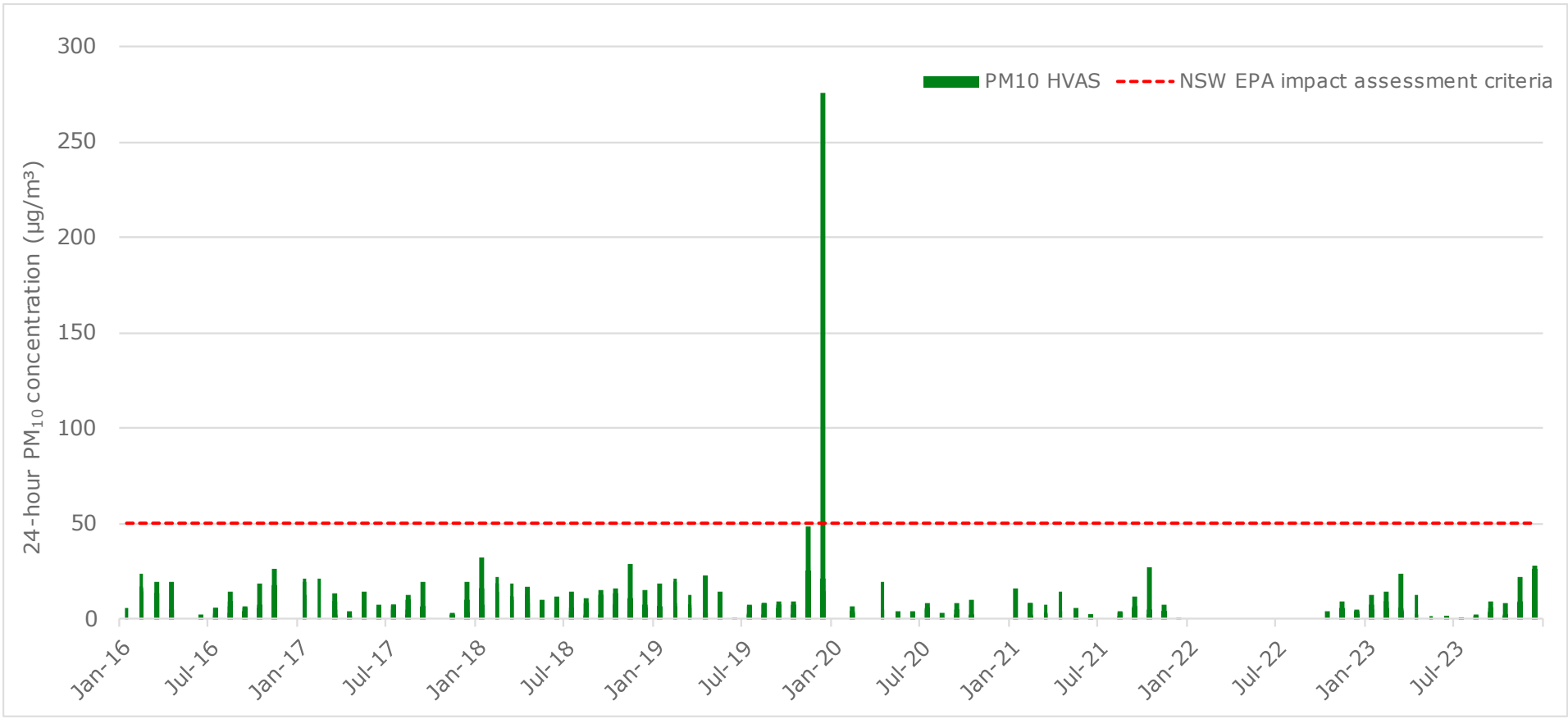


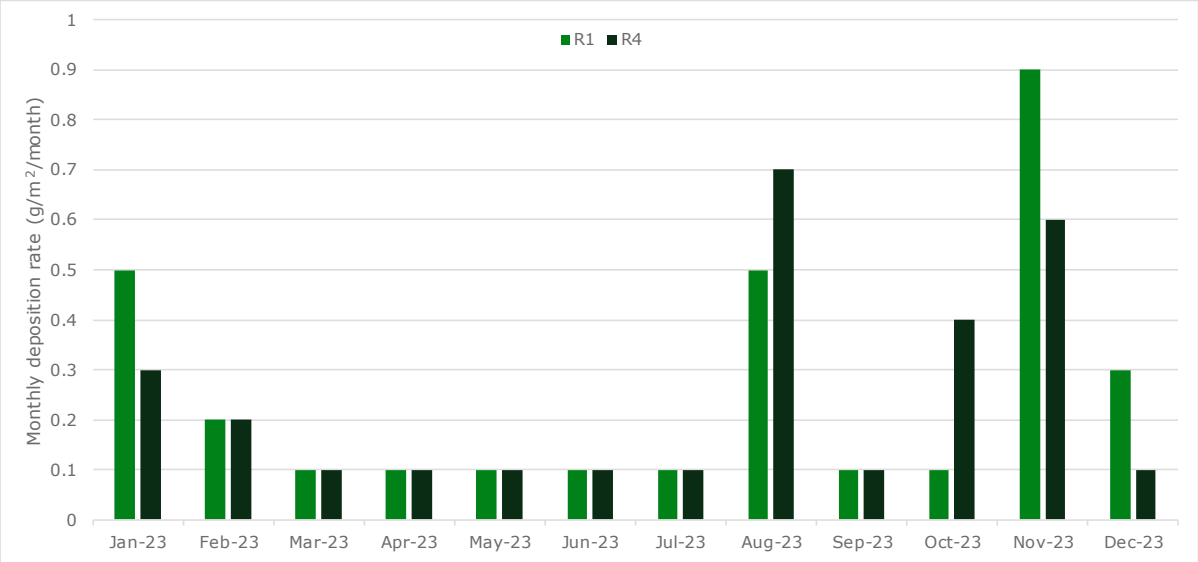
FIGURE A 10 2017 – 2023 HVAS MONITORING RESULTS FOR PM_{10}



Dust Deposition

Measured Results

FIGURE A 11 DUST DEPOSITION (TOTAL INSOLUBLE SOLIDS, G/M^2/MONTH) FOR 2023



Comparison to environmental assessment predictions

The Air Quality Assessment (AQA) for the Grants Road Sand Quarry Extension was completed by PAEHolmes in 2013, Air Quality Impact Assessment – Extension of Grants Road Quarry (PAEHolmes, 2013). The cumulative results predicted in the assessment indicate that the annual dust deposition level at the locations of the deposition gauges would be in the order of 1.7 g/m^2/month at R1 and 1.9 g/m^2/month at R4. The measured annual average dust deposition rates are 0.3 g/m^2/month at R1 and 0.2 g/m^2/month at R4. This is considerably lower than the conservative predictions made in the air quality assessment.

Given the results of the data during the monitoring period, currently no additional action is required to control environmental performance. Rather, it is recommended that current mitigation processes are sustained.

Trend analysis for dust deposition

Dust deposition measurements at R1 and R4 have been gathered from January 2017 to December 2023. Table A 6 and

Figure A 12 present the annual average dust deposition levels at R1 and R4. There is no clear trend in the data, however the annual average dust deposition levels measured in 2023 are the lowest measured over the past seven years. Figure A 13 presents the monthly dust deposition results from 2017 to 2023.

TABLE A 6: ANNUAL AVERAGE DUST DEPOSITION LEVELS (G/M^2/MONTH)

Year	R1	R4
2017	0.6	0.9
2018	0.4	0.5
2019	0.7	0.7
2020 [a]	2.2	0.7
2021	0.6	0.5
2022	0.6	0.5
2023	0.3	0.2

Notes:
[a] Only 9 months of data captured in 2020.

FIGURE A 12 ANNUAL AVERAGE DUST DEPOSITION LEVELS (G/M^2/MONTH) FOR 2017 TO 2023

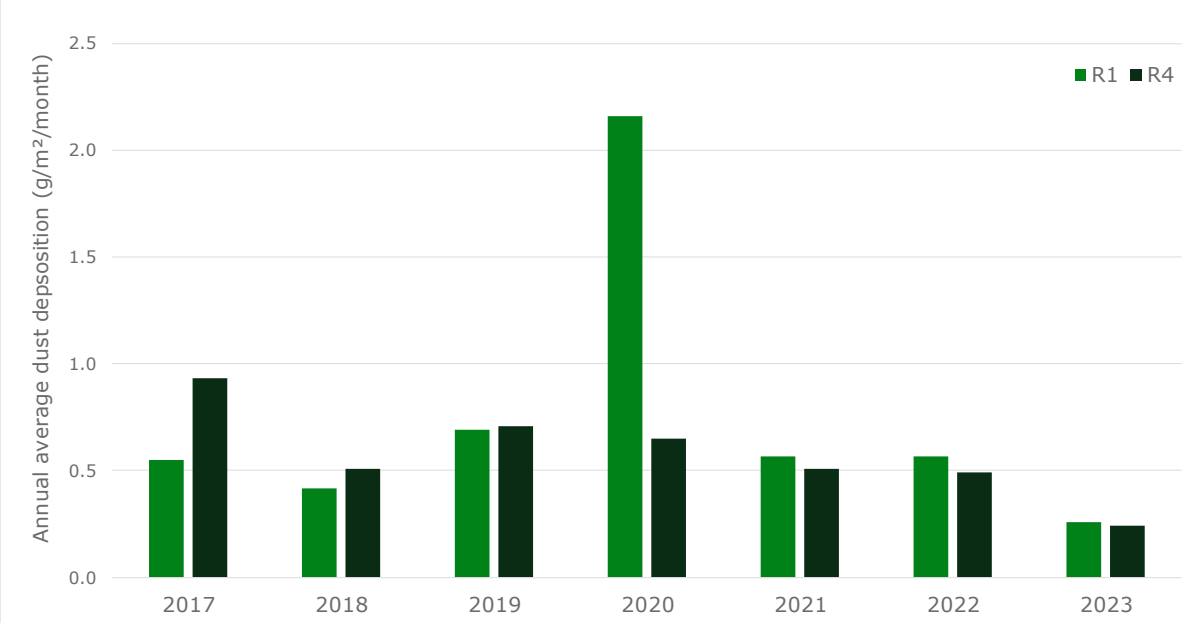
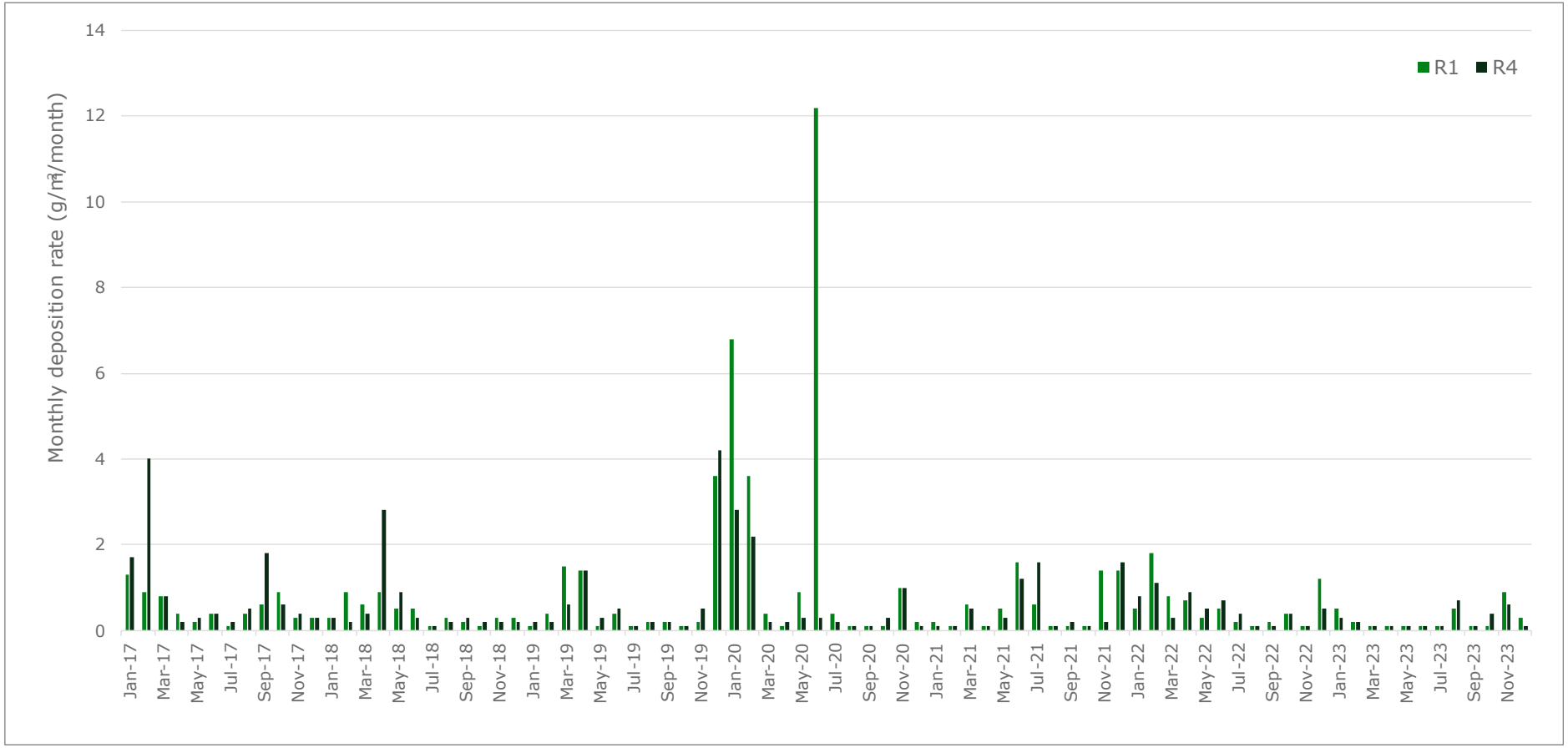


FIGURE A 13 2017 – 2023 DUST DEPOSITION MONITORING RESULTS



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Appendix 7
GROUNDWATER DEPENDENT ECOSYSTEM
Integrated Site Planning

GROUNDWATER DEPENDANT ECOSYSTEMS
2023 ANNUAL MONITORING REPORT

GRANTS ROAD
SAND QUARRY

FEBRUARY 2024
REF 354

GROUNDWATER DEPENDANT ECOSYSTEMS
2023 ANNUAL MONITORING REPORT

GRANTS ROAD

SAND QUARRY

Integrated Site Planning

Environmental and Land Management Consultants

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PREFACE

This report has been prepared by *Integrated Site Planning* to address the annual reporting requirements for High Priority Groundwater Dependant Ecosystems for the Grants Road Sand Quarry at Somersby.

REPORT PREPARED BY:

PHILLIP ANTHONY CONACHER B.Sc.(Hons), Dip.Urb Reg Planning, M.Nat.Res.
Project Director

TABLE OF CONTENTS

SECTION 1

INTRODUCTION & BACKGROUND

1.1 DOCUMENT INTENT

This report has been prepared by *Integrated Site Planning* to address the annual monitoring requirements of Condition 21 "Groundwater Dependant Ecosystem Monitoring and Management Program" of the Schedule 3 Environmental Performance Conditions specified within the Project Approval for the Grants Road Sand Quarry Extension project (Project Approval No. 08_0099 Mod 1 .

Integrated Site Planning have taken on the ongoing management and reporting requirements for projects from Conacher Consulting Pty Ltd from March 2023. The previous Figures and Plans prepared by Conacher Consulting have been retained within this Report for continuity purposes.

1.2 PROJECT SITE DETAILS

The quarry is located within Lots 1 & 2 DP 358717, Grants Road Somersby. The four monitoring plots for the Groundwater Dependant Ecosystems are located downslope of the quarry site within the adjoining Brisbane Water National Park, as shown in Figure 1.

1.3 GROUNDWATER DEPENDANT ECOSYSTEMS WITHIN 1KM

High Priority Groundwater Dependant Ecosystems (GDEs) were defined in the Water Sharing Plan for the Kulnura Mangrove Mountain Groundwater Source (Dept. of Infrastructure, Planning and Natural Resources 2006). The following High Priority GDEs have been identified within 1km of the site:

- Sandstone Hanging Swamp; and
- Hawkesbury Coastal Banksia Woodland.

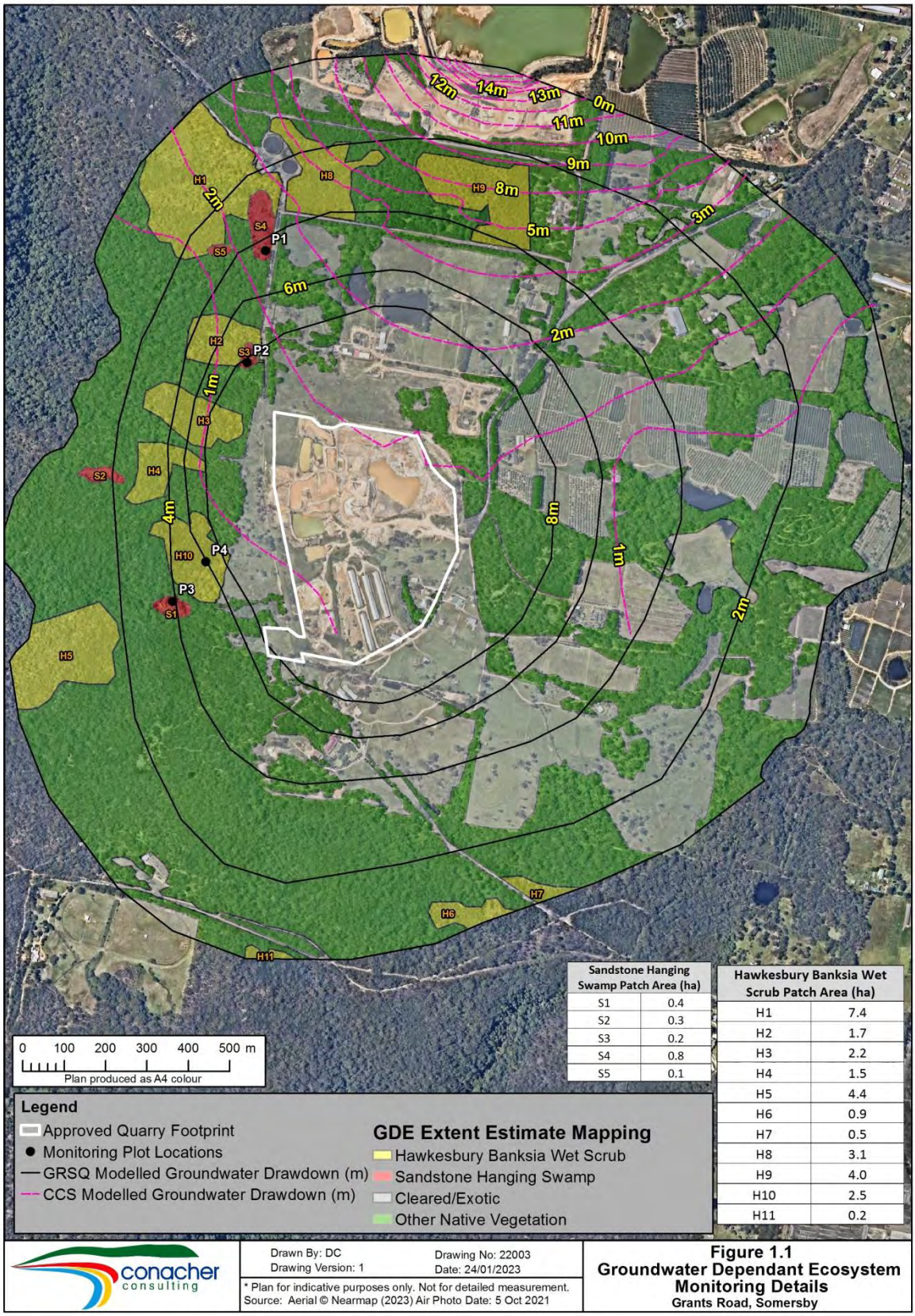
These map units relate to mapping prepared by NPWS in 2003 (Figure 1.1) which has been superseded by Council's current vegetation mapping prepared by Bell (2019). The plant community or vegetation type named Hawksbury Coastal Banksia Woodland is now included in the Hawksbury Banksia Wet Scrub plant community (Bell 2019). This plant community name is now used in this report.

Sandstone Hanging Swamp
The floristic composition of this vegetation type indicates that it is likely to have high dependence on groundwater and can be considered a high-dependence facultative GDE.

The current estimated extent of Sandstone Hanging Swamp within the modelled drawdown area is 1.8 hectares. The sizes of individual patches are mapped and listed in Figure 1.1.

Hawkesbury Banksia Wet Scrub
This plant community is similar to the Hawkesbury Banksia Scrub Woodland (Bell 2019) and is included as a GDE due to its midslope topographical location, higher abundance of moisture loving species and the presence of Sandstone Hanging Swamp in close proximity.

The current estimated extent of this plant community within the modelled drawdown area is 28.6 hectares. The sizes of individual patches are mapped and listed in Figure 1.1.



Sandstone Hanging Swamp Patch	Area (ha)
S1	0.4
S2	0.3
S3	0.2
S4	0.8
S5	0.1

Hawkesbury Banksia Wet Scrub Patch	Area (ha)
H1	7.4
H2	1.7
H3	2.2
H4	1.5
H5	4.4
H6	0.9
H7	0.5
H8	3.1
H9	4.0
H10	2.5
H11	0.2

conacher consulting

Drawn By: DC
Drawing Version: 1
Drawing No: 22003
Date: 24/01/2023

* Plan for indicative purposes only. Not for detailed measurement.
Source: Aerial © Nearmap (2023) Air Photo Date: 5 Oct 2021

Figure 1.1
Groundwater Dependant Ecosystem Monitoring Details
Grants Road, Somersby

SECTION 2

MONITORING DETAILS AND RESULTS

2.1 MONITORING METHODOLOGY

The monitoring program for High Priority Groundwater Dependant Ecosystems (GDEs) consists of a combination of aerial photograph assessment and mapping of GDEs within the predicted drawdown area, floristic plot surveys and field assessment for indicators and signs of potential project related impacts.

Four vegetation monitoring plots were surveyed for the selected locations shown in Figure 1.1. The GPS for the centre of each of the monitoring plots is recorded in Table 2.1.The extent of the monitoring plats was ten metres from the monitoring peg. The monitoring survey was undertaken on 17 March 2022. The monitoring variables observed and assessed are described below.

i. Native Plant Composition

Plot surveys were completed comparing the results of the baseline plot monitoring results from the initial monitoring species data with the current plot conditions. The native flora species present and projected foliage cover were assessed. Comments are provided for the species observed, including GDE species which are reliant on moist soil conditions.

ii. *Exotic Plant Composition*

All exotic flora species and total cover of exotic flora species was recorded for each plot.

iii. *GDE Extent and Distribution*

Mapping of GDE's was informed by aerial photograph analysis and interpretation using Nearmap imagery dated 15 August 2022.

iv. Vegetation Photo Point Monitoring

Photographs were taken for each monitoring quadrat from each cardinal point during the monitoring survey for record purposes and later evaluation.

v. Surface Erosion and Sedimentation Monitoring

A visual inspection of the GDE patches downslope from the quarry site was undertaken to monitor for any surface erosion or sedimentation impacts from the quarry operations.

2.2 FLORISTIC MONITORING RESULTS

Monitoring plots were sampled for the current monitoring period. A summary of the floristic plot survey results is provided in Table 2.1 and full floristic plot results are provided in Table 2.2.

The GDE indicator species were determined from the floristic plot results and are identified in Table 2.2. These species occur in moist or swamp environments such as coastal upland swamps. There are several other species characteristic of Hawkesbury Banksia Wet Scrub and Sandstone Hanging Swamp within the plots sampled, however, these species are considered to be not indicative of, or exclusive to, damp soil environments and can often be found in adjoining areas which do not contain high priority groundwater dependant ecosystems.

No change in indicator species richness was observed for the monitoring plots. It is recommended that a review of the monitoring methodology and results be undertaken for the next annual report.

TABLE 2.1
FLORISTIC PLOT RESULT SUMMARY

Variables	Plot 1 Sandstone Hanging Swamp	Plot 2 Sandstone Hanging Swamp	Plot 3 Sandstone Hanging Swamp	Plot 4 Hawkesbury Banksia Wet Scrub
Indicator Species Number				
2018 Monitoring	9	11	13	4
2019 Monitoring	9	11	13	4
2020 Monitoring	12	13	13	4
2021 Monitoring	12	13	13	4
2022 Monitoring	12	13	13	4
2023 Monitoring	12	13	13	4
Indicator Species Cover %				
2018 Monitoring	84	63	74	1
2019 Monitoring	79	63	69	1
2020 Monitoring	85	66	74	1
2021 Monitoring	85	66	74	1
2022 Monitoring	85	66	74	1
2023 Monitoring	90	70	80	1
Total Species Number				
2018 Monitoring	39	40	50	35
2019 Monitoring	39	40	50	35
2020 Monitoring	47	48	51	36
2021 Monitoring	47	48	51	36
2022 Monitoring	47	48	51	36
2023 Monitoring	47	48	51	36
GPS Location	-33.38474 151.26119	-33.38700 151.26104	-33.39210 151.258900	-33.39146 151.25991

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	Scientific Name	Common Name	Plot 1	Plot 2	Plot 3	Plot 4	
TREES							
Casuarinaceae	*Allocasuarina littoralis*	Black She-Oak		0.25		1	
Myrtaceae	*Angophora costata*	Sydney Red Gum	0.25		2		
Myrtaceae	*Angophora hispida*	Dwarf Apple				0.5	
Myrtaceae	*Corymbia gummifera*	Red Bloodwood			4		
Myrtaceae	*Eucalyptus haemastoma*	Broad-leaved Scribbly Gum			10		
Myrtaceae	*Eucalyptus piperita*	Sydney Peppermint			15		
Myrtaceae	*Eucalyptus resinifera subsp. resinifera*	Red Mahogany	10			5	
Myrtaceae	*Eucalyptus scias*	Large-fruited Red Mahogany	15				
Myrtaceae	*Eucalyptus sieberi*	Silvertop Ash	0.3	10			
Phyllanthaceae	*Glochidion ferdinandi*	Cheese Tree		0.5			
SHRUBS							
Apiaceae	*Platysace linearifolia*		1	0.5	20		
Araliaceae	*Polyscias sambucifolia subsp. Long Leaflets*	Elderberry Panax		0.25	0.5		
Cunoniaceae	*Bauera rubioides*	River Rose	1	2	2		
Cunoniaceae	*Callicoma serratifolia*	Black Wattle			0.25		
Dilleniaceae	*Hibbertia procumbens*	Spreading Guinea Flower				0.1	
Ericaceae	*Epacris obtusifolia*	Blunt-leaf Heath	0.25	0.1	0.1		
Ericaceae	*Epacris pulchella*	Wallum Heath				0.2	
Euphorbiaceae	*Amperea xiphoclada*				0.25		
Euphorbiaceae	*Pseudanthus orientalis*			0.1			
Fabaceae (Faboideae)	*Almaleea paludosa*		0.1				

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	Scientific Name	Common Name	Plot 1	Plot 2	Plot 3	Plot 4	
Fabaceae (Faboideae)	*Bossiaea scolopendria*					0.1	
Fabaceae (Faboideae)	*Dillwynia floribunda*				1	0.2	
Fabaceae (Faboideae)	*Pultenaea rosmarinifolia*		2	0.1			
Fabaceae (Faboideae)	*Viminaria juncea*	Native Broom	0.5	0.25	0.25		
Fabaceae (Mimosoideae)	*Acacia elata*	Cedar Wattle		1			
Fabaceae (Mimosoideae)	*Acacia linifolia*	White Wattle			0.1		
Fabaceae (Mimosoideae)	*Acacia longifolia subsp. longifolia*	Sydney Golden Wattle	0.5	0.5			
Fabaceae (Mimosoideae)	*Acacia myrtifolia*	Red-stemmed Wattle	0.1				
Fabaceae (Mimosoideae)	*Acacia oxycedrus*	Spike Wattle	15	0.1	1	0.1	
Fabaceae (Mimosoideae)	*Acacia parvipinnula*	Silver-stemmed Wattle	0.5				
Fabaceae (Mimosoideae)	*Acacia suaveolens*	Sweet Wattle	0.5			0.2	
Fabaceae (Mimosoideae)	*Acacia terminalis subsp. Long inflorescences*	Sunshine Wattle	0.2	0.2	0.25		
Myrtaceae	*Callistemon citrinus*	Crimson Bottlebrush	0.1	0.25			
Myrtaceae	*Leptospermum polygalifolium subsp. cismontanum*	Tantoon			20	10	
Myrtaceae	*Leptospermum polygalifolium subsp. polygalifolium*	Tantoon	1	2			
Myrtaceae	*Leptospermum trinervium*	Flaky-barked Tea-tree				0.1	
Pittosporaceae	*Pittosporum revolutum*	Rough Fruit Pittosporum				0.1	
Pittosporaceae	*Pittosporum undulatum*	Sweet Pittosporum				0.2	
Proteaceae	*Banksia ericifolia*	Heath-leaved Banksia	15	1	0.5	30	Regrowth observed
Proteaceae	*Banksia robur*	Swamp Banksia			0.5		
Proteaceae	*Grevillea sericea subsp. sericea*	Pink Spider Flower	0.1		0.25		
Proteaceae	*Grevillea speciosa*	Red Spider Flower	0.3				

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	**Scientific Name**	**Common Name**	**Plot 1**	**Plot 2**	**Plot 3**	**Plot 4**	
Proteaceae	*Hakea teretifolia*	Needlebush	0.2	0.25			
Proteaceae	*Lambertia formosa*	Mountain Devil			0.25		
Proteaceae	*Persoonia isophylla*		0.25				
Proteaceae	*Persoonia lanceolata*	Lance Leaf Geebung	0.3				
Proteaceae	*Persoonia levis*	Broad-leaved Geebung			0.25		
Proteaceae	*Petrophile pulchella*	Conesticks				0.25	
Santalaceae	*Leptomeria acida*	Sour Currant Bush	0.1				
Thymelaeaceae	*Pimelea linifolia*	Slender Rice Flower		0.1	0.1		
Groundcovers (Forbs)							
Anthericaceae	*Thysanotus juncifolius*				0.1		
Apiaceae	*Actinotus minor*	Lesser Flannel Flower		0.5	1	1	
Apiaceae	*Hydrocotyle laxiflora*	Stinking Pennywort		0.1			
Apiaceae	*Xanthosia pilosa*	Woolly Xanthosia	0.1	0.1			
Apiaceae	*Xanthosia tridentata*	Rock Xanthosia	0.1	0.1	0.5	0.1	
Blandfordiaceae	*Blandfordia grandiflora*	Christmas Bells	0.1				
Dilleniaceae	*Hibbertia procumbens*	Spreading Guinea Flower	0.1				
Droseraceae	*Drosera binata*	Forked Sundew		0.1			
Droseraceae	*Drosera peltata*	A Sundew		0.1			
Euphorbiaceae	*Monotaxis linifolia*			0.25	0.1		
Goodeniaceae	*Dampiera stricta*		0.1	0.2			
Goodeniaceae	*Goodenia hederacea*	Forest Goodenia	0.1				
Goodeniaceae	*Goodenia paniculata*			0.1			
Haemodoraceae	*Haemodorum corymbosum*		0.1				
Haloragaceae	*Gonocarpus micranthus*			0.1			

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	**Scientific Name**	**Common Name**	**Plot 1**	**Plot 2**	**Plot 3**	**Plot 4**	
Haloragaceae	*Gonocarpus tetragynus*	Poverty Raspwort			0.25		
Haloragaceae	*Gonocarpus teucrioides*	Germander Raspwort	0.1		0.5		
Orchidaceae	*Cryptostylis erecta*	Bonnet Orchid		0.1			
Phormiaceae	*Dianella caerulea var. producta*	Blue Flax-lily	0.1	0.1		0.25	
Phormiaceae	*Dianella prunina*	Blue Flax-lily				0.25	
Groundcovers (Ferns)							
Dennstaedtiaceae	*Histiopteris incisa*	Bat's Wing Fern		3	0.5	0.2	
Dennstaedtiaceae	*Pteridium esculentum*	Bracken		20	5		
Gleicheniaceae	*Gleichenia microphylla*	Scrambling Coral Fern	80	60	70	0.1	Regrowth observed
Lindsaeaceae	*Lindsaea linearis*	Screw Fern			0.1	0.25	
Selaginellaceae	*Selaginella uliginosa*	Swamp Selaginella		0.1	0.1		
Groundcovers (Monocots)							
Cyperaceae	*Corizandra cymbaria0*		1	1			
Cyperaceae	*Cyathochaeta diandra*					10	
Cyperaceae	*Gahnia clarkei*	Tall Saw-sedge	1	0.5	0.25		
Cyperaceae	*Gahnia sieberiana*	Red-fruit Saw-sedge	2		1		
Cyperaceae	*Gymnoschoenus sphaerocephalus*	Button Grass	0.5	0.5			
Cyperaceae	*Lepidosperma laterale*					5	
Cyperaceae	*Ptilothrix deusta*					20	
Cyperaceae	*Schoenus apogon*	Fluke Bogrush	0.1				
Cyperaceae	*Schoenus brevifolius*	Zig-zag Bog-rush	0.2		0.25		
Cyperaceae	*Schoenus melanostachys*				0.5		
Lomandraceae	*Lomandra gracilis*					10	

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	**Scientific Name**	**Common Name**	**Plot 1**	**Plot 2**	**Plot 3**	**Plot 4**	
Lomandraceae	*Lomandra longifolia*	Spiny-headed Mat-rush			1		
Lomandraceae	*Lomandra multiflora subsp. multiflora*	Many-flowered Mat-rush				0.1	
Lomandraceae	*Lomandra obliqua*					0.1	
Poaceae	*Entolasia marginata*	Bordered Panic			0.25	1	
Poaceae	*Entolasia stricta*	Wiry Panic	1	5	5		
Poaceae	*Eragrostis brownii*	Brown's Lovegrass		0.1			
Poaceae	*Microlaena stipoides var. stipoides*	Weeping Grass				1	
Poaceae	*Oplismenus aemulus*	Basket Grass				0.1	
Poaceae	*Plinthanthesis paradoxa*				0.25		
Restionaceae	*Empodisma minus*		1	0.5	2	0.1	
Restionaceae	*Eurychorda complanata*			0.25	0.5		
Xyridaceae	*Xyris gracilis*		0.1				
Groundcovers (Other)							
Apocynaceae	*Parsonsia straminea*	Common Silkpod	0.1		0.1	0.2	
Bignoniaceae	*Pandorea jasminoides*	Bower Vine		0.1			
Dicksoniaceae	*Calochlaena dubia*	Rainbow Fern			10		
Dilleniaceae	*Hibbertia scandens*	Climbing Guinea Flower		0.25			
Doryanthaceae	*Doryanthes excelsa*	Gymea Lily			1		
Fabaceae (Faboideae)	*Hardenbergia violacea*	False Sarsaparilla				0.1	
Lauraceae	*Cassytha glabella*		0.1	0.1			
Lauraceae	*Cassytha pubescens*	Downy Dodder-laurel			0.1		
Luzuriagaceae	*Eustrephus latifolius*	Wombat Berry				0.1	
Orchidaceae	*Cymbidium suave*	Snake Orchid			0.1		

TABLE 2.2 2023 MONITORING FLORISTIC PLOT OBSERVATIONS							
			Plant Cover Percentage				Browning / Dieback Observations
Family	**Scientific Name**	**Common Name**	**Plot 1**	**Plot 2**	**Plot 3**	**Plot 4**	
Pittosporaceae	*Billardiera scandens*	Hairy Apple Berry	0.1	0.1	0.1		
Rubiaceae	*Gynochthodes jasminoides*	Sweet Morinda		0.1	0.1	0.5	
Vitaceae	*Cissus hypoglauca*	Giant Water Vine			0.25		
Xanthorrhoeaceae	*Xanthorrhoea arborea*		0.25	0.25			
Exotics							
Verbenaceae	*Lantana camara*	Lantana	0.1				
+Shading: INDICATIVE SPECIES FOR GROUNDWATER DEPENDENT ECOSYSTEM							

2.3 QUALITATIVE MONITORING RESULTS

i. GDE Surface Erosion and Sedimentation

No surface erosion or sediment deposition attributable to the quarry operations was observed within any of the GDE monitoring areas during the monitoring surveys.

ii. Assessment of Groundwater Monitoring Data

The Water Monitoring results obtained by Larry Cook Consulting for the current monitoring period have been discussed with Larry Cook. These results have identified that no groundwater impacts attributable to the quarry operations have been detected during the monitoring.

iii Assessment of Extent of GDE

Sandstone Hanging Swamp

No detected decrease in the extent of this GDE due to project related impacts was observed since during the monitoring period.

Hawksbury Banksia Wet Scrub

No detected decrease in the extent of this GDE due to project related impacts was observed since during the monitoring period.

iv GDE Photo Point Results

The results of the photo point surveys are provided in Appendix 2.

2.4 ANNUAL RAINFALL DETAILS

Monthly rainfall data for the Mangrove Mountain Bureau of Meteorology weather station, located 10 kilometres to the north is provided in Table 2.3. A brief analysis of the data identifies that the 2023 rainfall (832mm) was below the average annual rainfall (1127mm) by 26%. January was the wettest month with 220mm of rain recorded, as compared to the January average of 108mm.

Records from Mangrove Mountain weather station (Bureau of Meteorology Weather Station N° 061375) were utilized because this weather station has been in continuous operation since 1994 and provides good reference data for the locality.

TABLE 2.3 RAINFALL DETAILS 2022 & 2023				
MONTH	**AMOUNT (mm)**		**AVERAGE (mm)**	**COMMENT**
	2022	**2023**		
January	73	220	100	Above Avg
February	36	122	148	Below Avg
March	443	81	159	Below Avg
April	146	68	79	Below Avg
May	88	12	78	Below Avg
June	7	13	106	Below Avg
July	549	13	64	Below Avg
August	42	43	61	Below Avg
September	160	9	67	Below Avg
October	196	51	81	Below Avg
November	22	134	93	Above Avg
December	22	66	87	Below Avg
Total	1784mm	832 mm	1127mm	Below Avg 26%

SECTION 3

COMPLIANCE WITH PERFORMANCE MEASURES

3.1 EROSION

The performance target requires negligible erosion of the surface within the GDEs as a result of adverse impacts attributable to the quarry operations authorised under the project approval. The trigger level for management intervention is observable erosion of the surface within the GDEs, directly attributable to the quarry operations authorised under the project approval.

No surface erosion within GDE areas attributable to the quarry operations was observed and no management intervention is required.

3.2 SEDIMENTATION

The performance target for sedimentation is that negligible sedimentation within the GDEs occurs as a result of adverse impact attributable to the quarry operations authorised under the project approval.

The trigger level for management intervention is observable sedimentation within the GDEs, attributable to the quarry operations authorised under the project approval.

No sedimentation within high priority GDE vegetation, attributable to the quarry operations was observed.

3.3 HIGH PRIORITY GROUND WATER DEPENDANT ECOSYSTEM EXTENT

The performance target for High Priority GDE area extent is for only minor changes in the sizes of the GDEs as a result of adverse impact attributable to the quarry operations authorised under the project approval.

The high priority GDEs within 1km of the site are likely to form a continuum across the landscape in response to fire and soil moisture availability (Bell 2013).

The trigger level for management intervention is adverse change in size of the GDEs of greater than 20% of the extent, directly attributable to the quarry operations authorised under the project approval.

In order to determine that a reduction in the extent of a High Priority GDE was attributable to the quarry operations a correlation with reduced GDE patch size or dieback and groundwater levels would be required. No reduction in GDE patch size has been determined for the current monitoring period.

3.4 GROUND WATER DEPENDANT ECOSYSTEM SPECIES COMPOSITION & DISTRIBUTION

The performance target for species composition and distribution is for no significant change to the composition or distribution of species within the GDEs, as a result of adverse impact attributable to the quarry operations authorised under the project approval.

The trigger level for management intervention is adverse change in composition or distribution of the dominant species, directly attributable to the quarry operations authorised under the project approval.

The GDE areas were burnt prior to site inspections undertaken in 2015 and are currently regenerating. Further changes between monitoring events are expected within monitoring plots 1 & 2 as these areas continue to regenerate. These changes are not related to the quarry operations at the subject site.

For the current monitoring period there was no significant adverse species composition or distribution changes within the GDEs, as a result of the project. A review of the monitoring process for GDE species presence/cover etc was not undertaken during the current monitoring program.

3.5 MITIGATION AND RESPONSE MEASURES

Monitoring has identified that all performance targets have been met for GDEs and it is determined that a requirement for mitigation or response measures has not been triggered in relation to the impact of quarry operations on Groundwater Dependant Ecosystems.

SECTION 4

CONCLUSIONS & RECOMMENDATIONS

4.1 CONCLUSIONS

The impacts from the quarry operations for the current monitoring period have not exceeded the compliance and performance measures for High Priority Groundwater Dependant Ecosystems as summarised in the compliance tables provided in Appendix 1.

4.2 RECOMMENDATIONS

Based on the results of annual monitoring and details provided in this report the following recommendations are provided.

I. The implementation of mitigation and response measures in relation to High Priority Groundwater Dependant Ecosystems and the current quarry operations is considered not necessary.

II. The 2025 GDE Monitoring Report is to include a review of the current GDE monitoring process to determine if any improvements in monitoring and recording procedures can be implemented to improve reporting outcomes for the project.

III. The 2025 GDE Monitoring Report is to include a review of the current classification and plant community description and names according to the NSW Vegetation Classification System and Integrated Bionet Vegetation Data Program.

5. REFERENCES

Bell (2007) *Review of Flora and Fauna Information for Grants Road Sands*, Gosford LGA.

Bell, S.A.J. 2019. A Revised Interim Vegetation Classification of the Central Coast Local Government Area. Report to Central Coast Council. Eastcoast Flora Survey.

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NSW Scientific Committee 2012, Coastal Upland Swamp in the Sydney Basin Bioregion – endangered ecological community listing, NSW Scientific Committee Final Determination. Available Online: http://www.environment.nsw.gov.au/determinations/coastaluplandswampfd.htm

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APPENDIX 1
ENVIRONMENTAL PERFORMANCE & COMPLIANCE STATUS SUMMARY

Details on the Environmental Performance and Compliance Status in relation to High Priority GDEs have been compiled for the Annual Reporting. This information is provided in Tables A1.1 and A1.2.

TABLE A1.1
ENVIRONMENTAL PERFORMANCE SUMMARY

Environmental Aspect	Approval Criteria	Summary of Monitoring Results in the Previous Monitoring Period	Summary of Monitoring Results in this Monitoring Period	Improvement Measures to be Implemented
High Priority Groundwater Dependant Ecosystems within 1km	The proponent must ensure that the project does not cause exceedances of the following performance measures: • Negligible erosion of the surface of GDEs • Negligible sedimentation within the GDEs • Minor changes in the size of the GDEs • No Significant change to the composition or distribution of species within the GDEs	No exceedances	No exceedances	Ensure appropriate erosion and sediment controls are maintained.

TABLE A1.2 COMPLIANCE STATUS				
Unique ID	**Compliance Requirement**	**Development Phase**	**Monitoring Methodology**	**Evidence & Comments**
Condition 19.	Negligible erosion of the surface of GDEs	Operations	Visual monitoring Annual Monitoring Reports	No surface soil erosion observed
	Negligible sedimentation within the GDEs	Operations	Visual monitoring Annual Monitoring Reports	No sedimentation observed
	Minor changes in the size of the GDEs	Operations	Aerial photograph and ground assessment Annual Monitoring Reports	No changes to the size of GDE observed
	No Significant change to the composition or distribution of species within the GDEs	Operations	Plot surveys Annual Monitoring Reports	No significant change to species composition/distribution

APPENDIX 2
MONITORING PLOT PHOTOGRAPHS

Photo 1.1 – Plot 1 Photo-monitoring point north direction

Photo 1.2 - Plot 1 Photo-monitoring point east direction

Photo 1.3 - Plot 1 Photo-monitoring point south direction

Photo 1.4 - Plot 1 Photo-monitoring point west direction

Photo 2.1 – Plot 2 Photo-monitoring point north direction

Photo 2.2 - Plot 2 Photo-monitoring point east direction

Photo 2.3 - Plot 2 Photo-monitoring point south aspect

Photo 2.4 - Plot 2 Photo-monitoring point west aspect

Photo 3.1 – Plot 3 Photo-monitoring point north direction

Photo 3.2 - Plot 3 Photo-monitoring point east direction

Photo 3.3 - Plot 3 Photo-monitoring point south direction

Photo 3.4 - Plot 3 Photo-monitoring point west direction

Phot 4.1 – Plot 4 Photo-monitoring point north direction

Photo 4.2 - Plot 4 Photo-monitoring point east direction

Photo 4.3 - Plot 4 Photo-monitoring point south direction

Photo 4.4 - Plot 4 Photo-monitoring point west direction

Appendix 8
SOMERSBY MINTBUSH
Integrated Site Planning

SOMERSBY MINTBUSH
2023 ANNUAL MONITORING REPORT

GRANTS ROAD
SAND QUARRY

FEBRUARY 2024
REF: 355

SOMERSBY MINTBUSH
2023 ANNUAL MONITORING REPORT

GRANTS ROAD
SAND QUARRY

Integrated Site Planning

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PREFACE

This report has been prepared by *Integrated Site Planning* to address the 2023 annual monitoring and reporting requirements for Somersby Mintbush for the Grants Road Sand Quarry at Somersby.

REPORT PREPARED BY:

PHILLIP ANTHONY CONACHER B.Sc.(Hons), Dip.Urb Reg Planning, M.Nat.Res.
Project Director

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SECTION 1

INTRODUCTION

1.1 DOCUMENT INTENT

This report has been prepared by *Integrated Site Planning* to address the monitoring requirements of Condition 22 “Somersby Mintbush Monitoring and Management Program” of the Schedule 3 Environmental Performance Conditions specified within the Project Approval for the Grants Road Sand Quarry Extension project (Project Approval No. 08_0099 Mod 1).

Integrated Site Planning have taken on the ongoing management and reporting requirements for projects from Conacher Consulting Pty Ltd from March 2023. The previous Figures and Plans prepared by Conacher Consulting have been retained within this Report for continuity purposes.

1.2 PROJECT SITE DETAILS

The quarry site is located within Lots 1 & 2 DP 358717, Grants Road Somersby. The monitoring sites for the Somersby Mintbush are located in the adjoining area of the Brisbane Water National Park located approximately 200 metres (population 3) to 400 metres (population 4) to the west of the quarry, as shown in Figure 2.1.

1.3 PREVIOUS MONITORING DETAILS

Annual Monitoring Surveys for the populations of the Somersby Mintbush commenced in October 2105. The results of these monitoring surveys have been reported in each Annual Report and are summarised in Table 2.1. The overall numbers of *P. junonis* have increased in a fluctuating trend between the various surveys.

SECTION 2

ANNUAL MONITORING RESULTS

2.1 ANNUAL SOMERSBY MINTBUSH COUNT RESULTS

Counts of flowering *P. junonis* plants were undertaken on 24 October 2023 at the Somersby Mintbush subpopulation locations 3 and 4. Some plants were observed still flowering on 24 January 2023, but are not included in the annual monitoring results.

Flowering plants were identified and counted. Plants were defined as any flowering *P. junonis* plants in a clump with a separation distance of ≥30cm from the nearest *P. junonis* plant. This method of counting plants, based on a minimum separation distance of 300mm, is likely to result in a general decrease in plant numbers as the growth area of the plants extends into the 300mm separation area.

The results of the counts are provided in Table 2.1 and the locations of the sub-populations are shown in Figure 2.1.

TABLE 2.1
SOMERSBY MINT BUSH ANNUAL MONITORING COUNT RESULTS

Sub-Population / Location	Count Results Flowering Plants								
	2015	2016	2017	2018	2019	2020	2021	2022	2023
3 (33.3870/ 151.26104)	0	2	18	42	29	46	41	43	36
4 (33.39146/ 151.25991)	0	0	34	394	484	498	472	485	462

The above data indicates a slight decrease in numbers of *P. junonis* observed between the 2022 and 2023 monitoring surveys. This decrease is most likely the result of variation to the seasonal flowering conditions. Additionally, the above average rainfall in the autumn and winter months (Table 2.2) may have influenced favourable growing conditions which are reflected by increased flowering recordings.

2.2 QUALITATIVE MONITORING OBSERVATIONS

2.2.1 Signs of Surface Erosion

No signs of surface erosion attributable to the quarry were observed. While the monitoring plots are located at a lower elevation than the quarry, runoff water from the quarry area does not flow over the vegetation of the monitoring plots.

Some soil erosion from the Great North Walk track was observed.

2.2.2 Signs of Sedimentation

No signs of sedimentation at the monitoring locations attributable to the quarry were observed.

2.2.3 Density of Surrounding Vegetation

The density of the surrounding vegetation has been increasing since the NPWS hazard reduction burn completed in October 2015.

Dieback and decomposition of the *Banksia ericifolia* is still evident. Ongoing regrowth was evident at sub-population 3. The following estimates of the vegetation density for both sub-populations are provided:

Sub-population 3

Tree Cover:	Approximately 15% to 10m tall
Shrub Cover:	Open with approximately 80% cover to 2-3m tall with vigorously regenerating heath.
Groundlayer:	Approximately 80% cover to 1m.

Sub-population 4

Tree Cover:	Approximately 20 -25% to 8m tall
Shrub Cover:	Approximately 20-60% cover to 4m tall, with dieback of tall shrub cover observed.
Groundlayer:	Approximately 90% cover to 1.5m.

2.2.4 Fire Disturbance

No signs of fire disturbance attributable to the project were observed. No fire disturbance within the current monitoring period was observed.

2.2.5 Herbivory

No signs of herbivory were observed. However, scats from feral deer and swamp wallaby were observed within the survey plots.

2.2.6 Other Disturbances

No ongoing disturbances were observed during the current monitoring period.

2.2.7 Annual Rainfall Details

Monthly rainfall data for the Mangrove Mountain Bureau of Meteorology weather station, located 10 kilometres to the north is provided in Table 2.2. A brief analysis of the data identifies that the 2023 rainfall (832mm) was below the average annual rainfall (1127mm) by 26%. January was the wettest month with 220mm of rain recorded, as compared to the January average of 108mm.
Records from Mangrove Mountain weather station (Bureau of Meteorology Weather Station N° 061375) were utilized because this weather station has been in continuous operation since 1994 and provides good reference data for the locality.

TABLE 2.2 RAINFALL DETAILS 2022 & 2023				
MONTH	**AMOUNT (mm)**		**AVERAGE (mm)**	**COMMENT**
	2022	**2023**		
January	73	220	100	Above Avg
February	36	122	148	Below Avg
March	443	81	159	Below Avg
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October	196	51	81	Below Avg
November	22	134	93	Above Avg
December	22	66	87	Below Avg
Total	1784mm	832 mm	1127mm	Below Avg 26%

2.3 MONITORING TRENDS

A slight decrease in the total number of plants was recorded at both subpopulations compared to the previous monitoring data.

The decreased numbers of flowering plants detected at both sub-populations is likely to be a result of the seasonal flowering variation and counting methods. Additionally individual plants may have spread in area of coverage, merging into a nearby plant. This would result in plants previously recorded as two plants now being recorded as one plant.

Vigorous regrowth of the shrub cover for sub-population 3 has been observed over the last few monitoring events and it is expected that shading of *P. junonis* by a dense shrub cover may eventually cause the population numbers to decline.

Continuing regrowth of *P. junonis* was observed at subpopulation 4. The tall shrub cover at sub-population 4 has died back since the hazard reduction burn and the levels of tall shrub regrowth at this location are not as vigorous as sub-population 3.

2.4 PROJECT IMPACT DISCREPANCIES

No project impact discrepancies between the predicted and actual impacts of the project were observed for the current monitoring period regarding Somersby Mintbush.

2.5 MEASURES TO IMPROVE PROJECT PERFORMANCE

The annual surveys for *P. junonis* have been undertaken annually since 2015. To increase the reporting performance and outcomes of the plant data collected the following procedures are to be incorporated into the next monitoring event and reporting process:

1. Provide an identifiable survey peg, with GPS location identifier recorded for each subpopulation.
2. Identify a specific clump of *P. junonis* for photographic monitoring comparison recording within each survey area.
3. Identify the outer edges of each subpopulation for recording purposes.

4. Review the counting/recording method in comparison to standard flora survey methods identified in the Biodiversity Assessment Methodology process.

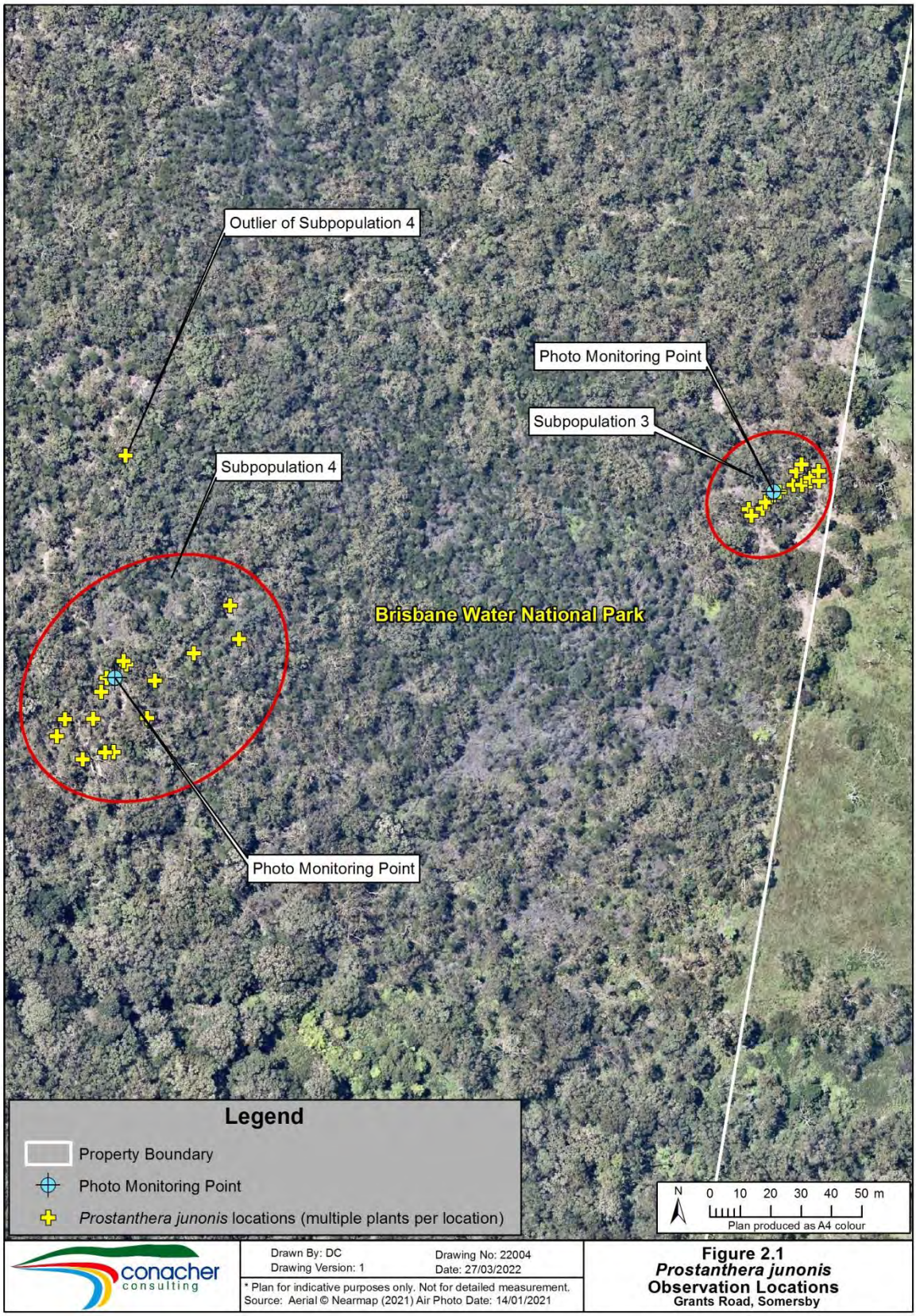

Figure 2.1
***Prostanthera junonis* Observation Locations**
Grants Road, Somersby

SECTION 3

CONCLUDING COMMENTS

3.1 PROJECT COMPLIANCE ASSESSMENT

An assessment of the project performance indicators and responses required is provided in Table 3.1. This analysis has determined that there are no issues relating to Low/Moderate/High impacts of the quarrying operations on the populations to the Somersby Mintbush for the reporting period.

Appendix 1 contains a further summary of the Environmental Performance and Compliance Status in relation to the implementation of Condition 19 for the Somersby Mintbush.

However, it has been identified that there continues to be an ongoing requirement to maintain the boundary fence between the National Park and the quarry site as a result of damage by feral deer entering from the National Park.

3.2 CONCLUDING COMMENTS

Based on the results of the ongoing Somersby Mintbush monitoring and site condition reporting the following concluding comments are provided:

i. A decrease in the sub-populations 3 and 4 of Somersby Mintbush was recorded compared to the previous monitoring period.

ii. A slight decrease in the Somersby Mintbush population recorded is likely a result of seasonal flowering occurrences at the time of survey.

iii. Suitable environmental controls should continue to be maintained for the Project.

iv. The measures to improve the survey and reporting for the Somersby Mintbush (Section 2.5) should be considered for implementation during the next plant survey period.

TABLE 3.1
SOMERSBY MINTBUSH COMPLIANCE ASSESSMENT FOR 2022 MONITORING PERIOD

Trigger Levels	1 - Erosion and Sedimentation		2 - Fire Impacts		3 - Stock Herbivory		4 - Other Disturbances		5 - Population Decline	
	Trigger	**Response**	**Trigger**	**Response**	**Trigger**	**Response**	**Trigger**	**Response**	**Trigger**	**Response**
Low Impact	Sediment / erosion event offsite within 5m of Somersby Mintbush Population	-Report to GRSQ -Include in Annual Report -Immediately correct /improve erosion and sediment control - Consult with OEH to rehabilitate area	Fire outbreak on quarry site within vicinity of Somersby Mintbush Population	-Report to GRSQ -Include in Annual Report -Extinguish fire and improve controls to present reoccurrence.	One-off herbivory event from stock on site resulting in minor grazing on Somersby Mintbush Habitat	-Report to GRSQ -Include in Annual Report -Immediately repair / improve fences - Remove any manure	NA	NA	Somersby Mintbush dieback in excess of 10%	-Report to GRSQ -Include in Annual Report - Assess whether natural shading has reduced population - Identify whether attributable to the project -Provide offsets if attributable to the project and recovery does not occur
Moderate	Sediment / erosion event which directly impacts on Somersby Mintbush Population but does not result in population dieback	-Immediately Report to GRSQ - Immediately Report to DPE -Include in Annual Report -Immediately correct /improve erosion and sediment controls - Consult with OEH to rehabilitate area	Fire outbreak from quarry site which impacts habitats of Somersby Mintbush Population but does not result in Somersby Mintbush dieback	-Immediately Report to GRSQ & DPE -Include in Annual Report -Extinguish fire and improve controls to prevent reoccurrence. - Monitor and provide offsets if recovery does not occur	Repeat herbivory events from stock on site resulting in grazing on Somersby Mintbush Habitat	-Report to GRSQ -Include in Annual Report -Immediately repair / improve fences -Remove any manure - Report to DPE	NA	NA	Somersby Mintbush dieback in excess of 25%	-Report to GRSQ -Include in Annual Report - Assess whether natural shading has reduced population - Identify whether attributable to the project -Consult with DPE/OEH -Provide offsets if attributable to the project and recovery does not occur
High Impact	Sediment / erosion event which directly impacts on Somersby Mintbush Population resulting in population dieback	-Immediately Report to GRSQ - Immediately Report to DPE -Include in Annual Report -Immediately correct /improve erosion and sediment control - Consult with OEH to rehabilitate area	Fire outbreak from quarry site which impacts habitats of Somersby Mintbush Population & results in Somersby Mintbush dieback	-Immediately Report to GRSQ & DPE -Include in Annual Report -Extinguish fire and improve controls to prevent reoccurrence. - Monitor and provide offsets if recovery does not occur	Repeat herbivory events from stock on site resulting in grazing on Somersby Mintbush Habitat and noticeable physical habitat damage	-Report to GRSQ -Include in Annual Report -Immediately repair / improve fences - Remove any manure - Report to DPE	Disturbance event from quarry operations associated with machinery or soil movements	-Report to GRSQ - Report to DPIE -Include in Annual Report -Improve operational procedures - Provide offsets if attributable to the project and recovery does not occur	Somersby Mintbush dieback in excess of 50%	-Report to GRSQ -Include in Annual Report - Identify whether attributable to the project -Consult with DPIE - Assess whether natural shading has reduced population -Provide offsets if attributable to the project and recovery does not occur
2023 Monitoring Period Results	**No impact observed**	**No response required**	**No impact observed**	**No response required**	**No impact observed**	**Ongoing fence maintenance**	**No impact observed**	**No response required**	**Population decrease observed at both sub-populations**	**No response required**

REFERENCES

Australian Government Bureau of Meteorology 2023 Mangrove Mountain (Station 061375) Daily Weather Observation (Jan-Dec 2023).

Conacher Consulting (2022) Somersby Mintbush 2021 Annual Monitoring Report, Grants Road Sand Quarry

Conacher Consulting (2023) Somersby Mintbush 2022 Monitoring Report, Grants Road Sand Quarry Extension Lot 1 DP 358717 270 Grants Road Somersby.

NSW National Parks and Wildlife Service (2000) Somersby Mintbush *Prostanthera junonis* Recovery Plan. NSW NPWS. Hurstville NSW.

APPENDIX 1
ENVIRONMENTAL PERFORMANCE & COMPLIANCE STATUS SUMMARY

Details on the Environmental Performance and Compliance Status in relation to Somersby Mintbush have been requested for the Annual Reporting. This information is provided in Tables A1.1 and A1.2.

TABLE A1.1
ENVIRONMENTAL PERFORMANCE

Environmental Aspect	Approval Criteria	Summary of Monitoring Results in the Previous Monitoring Period	Summary of Monitoring Results in this Monitoring Period	Improvement Measures to be Implemented
Somersby Mintbush	Negligible Environmental Consequences	**Sub Pop 3.** 43 plants **Sub Pop 4** 485 plants No erosion, sedimentation observed.	**Sub Pop 3.** 36 plants 8% decrease in count **Sub Pop 4** 462 plants 9% decrease in count No erosion, sedimentation, bushfire or grazing observed.	Undertake ongoing maintenance to western boundary fences.

A compliance status table is provided in Table A1.2.

TABLE A1.2
COMPLIANCE STATUS

Unique ID	Compliance Requirement	Development Phase	Monitoring Methodology	Evidence & Comments
Condition 19.	Negligible environmental consequences	Operations	Direct population counts and qualitative observation of impacts	Annual Monitoring Reports

Appendix 9
LANDSCAPE & REHABILITATION MONITORING
Integrated Site Planning

LANDSCAPE, REHABILITATION
&
BIODIVERSITY OFFSET AREA

2023 ANNUAL MONITORING REPORT

GRANTS ROAD
SAND QUARRY

FEBRUARY 2024
REF: 353

LANDSCAPE, REHABILITATION
&
BIODIVERSITY OFFSET AREA

2023 ANNUAL MONITORING REPORT

GRANTS ROAD
SAND QUARRY

Integrated Site Planning

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PREFACE

This Report has been prepared by *Integrated Site Planning* to address the annual monitoring and reporting requirements under the Landscape & Rehabilitation Management Plan and Biodiversity Offset Management & Habitat Rehabilitation Plan for the Grants Road Sand Quarry at Somersby.

REPORT PREPARED BY:

PHILLIP ANTHONY CONACHER B.Sc.(Hons), Dip.Urb Reg Planning, M.Nat.Res.
Project Director

TABLE OF CONTENTS

SECTION 1

INTRODUCTION & BACKGROUND

1.1 INTRODUCTION

This Landscape, Rehabilitation & Biodiversity Offset Area 2023 Annual Monitoring Report has been prepared by *Integrated Site Planning* for the Grants Road Sand Quarry (Application No. 08-0099 / Mod 1).

This Report provides details on the compliance with the Landscape & Rehabilitation Management and Biodiversity Offset Management requirements for the Grants Road Sand Quarry at Somersby. The quarry is managed and operated by Grant's Rd Sand Pty Ltd.

Integrated Site Planning have taken on the ongoing management and reporting requirements for projects from Conacher Consulting Pty Ltd from March 2023. The previous Figures and Plans prepared by Conacher Consulting have been retained within this Report for continuity purposes.

1.2 DETAILS ON CURRENT MANAGEMENT PLANS

A Landscape and Rehabilitation Management Plan (LRMP) (Conacher Consulting 2019) and a Biodiversity Offset Management & Habitat Rehabilitation Plan (BOMHRP)(Conacher Consulting 2019) have been approved to meet the current project approval and commitment requirements.

This Report provides details on the works and performance of the Project in relation to these documents and the following Project Approval Conditions and Commitments:

i. Schedule 3 Environmental Performance Conditions

Category: Biodiversity

- Condition 23 Biodiversity Offset Strategy
- Condition 24 Long Term Security of Offset

Category: Landscape

- Condition 25 Rehabilitation Objectives
- Condition 26 Progressive Rehabilitation
- Condition 27 Landscape & Rehabilitation Management Plan
- Condition 28 Conservation & Rehabilitation Bond

ii. Statement of Commitments

- No. 6 Soils and Land Capability
- No. 9 Biodiversity & Environmental Management

SECTION 2

BIODIVERSITY OFFSET STRATEGY REPORTING

2.1 BACKGROUND

Details on the implementation of the current approved Biodiversity Offset Strategy is outlined within the Biodiversity Offset Management & Habitat Rehabilitation Plan (BOMHRP) (Conacher Consulting 2019). The annual monitoring and compliance requirements and results are addressed in Table 2.1. All figures referenced are provided in Appendix 1.

2.2 BIODIVERSITY OFFSET AREA WORKS COMPLETED

The following works have been completed during the reporting period in accordance with the Biodiversity Offset Strategy requirements for the Project:

i. **Floristic Monitoring Data**

Floristic monitoring data for estimates of plant density percentage cover within plots (20m x 20m) established within each of the Biodiversity Offset Areas was undertaken during the establishment period. This data is provided in Appendix 4 of this Report.

ii. **Fencing of Biodiversity Offset Areas**

The Biodiversity Offset Areas A & B are protected with deer and livestock proof fencing. The fencing was inspected during the current monitoring period The location of Biodiversity Offset Area fencing is shown in Figure 1. Fencing around Offset Area B and C was assessed as secure. Ongoing maintenance is required for the fence around Offset Area A.

iii. **Maintenace of Fauna Nest Boxes**

The nest box locations are shown in Figure 2.1. The results of the nest box monitoring are provided in Appendix 3. Fauna nest boxes were installed within the Biodiversity Offset Areas in 2015. Several of the nest boxes were installed in parts of the site which are now designated as a Landscape Buffer Area. All boxes within the site are to continue to be maintained, however where nest box relocation is required, some nest boxes may be relocated to the current Biodiversity Offset Areas of the site.

The following actions have been undertaken for the nest boxes during the current reporting period:

- 5 nest boxes replaced
- 2 nest boxes repaired
- 16 new boxes purchased for replacement, not yet installed.

Ongoing nest box and support fittings condition and fauna use assessments are to be undertaken during May to August, during the monitoring period. Any repairs or replacement necessary are to be undertaken during the monitoring period when bird species are not utilising the nest boxes.

2.3 BIODIVERSITY OFFSET STRATEGY COMPLIANCE DETAILS

A compliance assessment for the Biodiversity Offset Strategy requirements for the current monitoring period is provided in Table 2.1.

TABLE 2.1 BIODIVERSITY OFFSET STRATEGY MONITORING COMPLIANCE DETAILS							
Approval N° Table 3.1	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
Condition 27 (f) Commitment 9 BOMHRP-1	Soil Management	1. Install erosion and sediment controls to protect offset areas and prevent soil loss during weed control and rehabilitation activities	Operation 1-3 years	Project ecologist inspection Works records	Annual Monitoring Report -Photographs	Existing grassed areas left downslope of the works are providing erosion and sediment control. Water quality pond created in offset area.	Monitor regularly and ensure any additional measures are implemented as necessary
Condition 27 (f) Commitment 9 BOMHRP-2	Soil Management	2. Undertake soil and landform remediation and stabilisation works for heavily disturbed areas	Operation 1-3 years	Project ecologist inspection works records	Annual Monitoring Report -Photographs -Mapping	No soil management works have been undertaken in offset areas during monitoring period.	Monitor and progressively implement over additional areas where required.
Condition 27 (f) Commitment 9 BOMHRP-3	Weed Management	3. Undertake Primary Weed Control Works	Operation 1-3 years	Project ecologist inspection Works records	Annual Monitoring Report -Monitoring Plot Data -Mapping	Primary weed control has been commenced in Biodiversity Offset Area A and B. Physical removal of Lantana camara and Pampas Grass undertaken and spraying of Crofton Weed and Blackberry commenced. See Figures 2.2 to 2.4 for weed mapping.	Continue works progressively.

TABLE 2.1 BIODIVERSITY OFFSET STRATEGY MONITORING COMPLIANCE DETAILS							
Approval N° Table 3.1	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
Condition 27 (f) Commitment 9 BOMHRP-4	Weed Management	4. Undertake Secondary Weed Control Works	Operation 4-10 years	Project ecologist inspection Works records	Annual Monitoring Report -Monitoring Plot Data -Mapping	Not commenced.	Follow up primary weed control with secondary weed control.
Condition 27 (f) Commitment 9 BOMHRP-5	Revegetation	5. Obtain planting material (seeds / plant stock)	Operation 1-6 years	Tax invoice records	Annual Monitoring Report -Tax Invoices	Initial brush matting trials have commenced over capping areas. Further tube stock planting or seeding will be required if brush matting is not successful. Works complete by quarry, tax invoices not relevant.	Continue to monitor.
Condition 27 (f) Commitment 9 BOMHRP-6	Revegetation	6. Undertake seeding and planting works	Operation 1-6 years	Project ecologist inspection Works records	Annual Monitoring Report -Plot data -Photos -Mapping	As above. Plot data not relevant, further time required to observe works results.	None required at this stage.
Condition 27 (f) Commitment 9 BOMHRP-7	Revegetation	7. Maintain plantings	Operation 1-6 years	Project ecologist inspection Works records	Plot data -Photos -Mapping	No plantings require maintenance at this time.	None required.

TABLE 2.1 BIODIVERSITY OFFSET STRATEGY MONITORING COMPLIANCE DETAILS							
Approval N° Table 3.1	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
Condition 27 (f) Commitment 9 BOMHRP-8	Access Control	8. Install fencing to exclude livestock and deer from Offset Areas A & B	Operation 1-3 years	Project ecologist inspection	Annual Monitoring Report -Fence mapping -Photos	See fence locations in Figure 2.1. Maintenance required for Area A fence	Ongoing Maintenance
Condition 27 (f) Commitment 9 BOMHRP-9	Access Control	9. Maintain fencing to exclude livestock from Offset Area C	Operation 1-26 years	Project ecologist inspection	Annual Monitoring Report	No maintenance required for current monitoring period.	None required.
Condition 27 (f) Commitment 9 BOMHRP-10	Access Control	10. Maintain all exclusion fencing in working condition	Operation 1-26 years	Project ecologist inspection	Annual Monitoring Report	No maintenance required for current monitoring period.	None required.
Condition 27 (f) Commitment 9 BOMHRP-11	Habitat Enhancement	11. Install nest boxes and hollow logs to meet hollow tree offset requirement as clearing occurs	Operation 1-6 years	Project ecologist inspection	Annual Monitoring Report	Two nest boxes identified as requiring repair for current monitoring period.	Ongoing maintenance/ replacement works.
Condition 27 (f) Commitment 9 BOMHRP-12	Habitat Enhancement	12. Salvage environmental/habitat resources where available from quarry footprint and transfer to Offset Areas A & B	Operation 1-10 years	Project ecologist inspection Works records	Annual Monitoring Report -Photos	Undertake progressively as footprint clearing is undertaken.	None required.
Condition 27 (f) Commitment 9 BOMHRP-13	Bushfire Management	13. Protect non-established plantings from bushfire	Operation 1-6 years	Project ecologist inspection	Annual Monitoring Report	Not applicable for current monitoring period.	None required.

TABLE 2.1 BIODIVERSITY OFFSET STRATEGY MONITORING COMPLIANCE DETAILS							
Approval N° Table 3.1	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
Condition 27 (f) Commitment 9 BOMHRP-14	Bushfire Management	14. Allow natural bushfire disturbance and revegetation for areas containing established vegetation	Operation 1-26 years	Project ecologist inspection	Annual Monitoring Report -Monitoring Plot data -Photographs	No fire events detected during current monitoring period.	None required.
Condition 27 (f) Commitment 9 BOMHRP-15	Bushfire Management	15. Protect nest boxes from fire and/or replace if burnt out	Operation 1-10 years	Project ecologist inspection	Annual Monitoring Report	No fire events detected during current monitoring period.	None required.
Condition 27 (f) Commitment 9 BOMHRP-16	Monitoring Evaluation & Reporting	16. Undertake Annual Monitoring as per the Monitoring Strategy	Operation 1-26 years	Project ecologist inspection	Annual Monitoring Report	This report has been prepared to address this requirement.	None required.
Condition 27 (f) Commitment 9 BOMHRP-17	Monitoring Evaluation & Reporting	17. Re-assess risks to implementation of actions	Operation 1-10 years	NA	Annual Monitoring Report	No risks identified	None required.
Condition 27 (f) Commitment 9 BOMHRP-18	Monitoring Evaluation & Reporting	18. Implement adaptive response strategies	Operation 1-10 years	NA	Annual Monitoring Report	Not applicable	None required.
Condition 27 (f) Commitment 9 BOMHRP-19	Monitoring Evaluation & Reporting	19. Prepare annual monitoring reports	Operation 1-26 years	Project ecologist reporting	Annual Monitoring Report	This report has been prepared to address this requirement.	None required.

Action from Table 3.1 BOMHRP

SECTION 3

LANDSCAPE & REHABILITATION MANAGEMENT PLAN REPORTING

The details of the results of annual monitoring for the actions identified in Table 2.1 of the Landscape & Rehabilitation Management Plan (LRMP) are provided in Table 3.1. Details on the compliance with specific approval conditions are documented in this Section.

3.1 LANDSCAPE REHABILITATION OBJECTIVES (CONDITION 25)

A requirement for rehabilitation works in the resource extraction area has not been triggered during the current monitoring period. The final rehabilitation objectives are outlined in Section 4.1 of the LRMP and summarised in Table 3.2.

3.2 PROGRESSIVE REHABILITATION (CONDITION 26)

A requirement for rehabilitation works has not been triggered during the current monitoring period. An analysis of disturbed areas and rehabilitation or revegetation needs will be completed during the next monitoring period.

3.3 LANDSCAPE & REHABILITATION MANAGEMENT PLAN (CONDITION 27)

A Landscape and Rehabilitation Management Plan has been prepared to address Condition 27 of the project approval under Modification 1. The requirement for Landscape and Rehabilitation works was not triggered during the current monitoring period. An analysis for areas for Landscape Rehabilitation works will be completed during the next monitoring period to evaluate the progress of the extraction program against the Stages of Works.

3.4 CONSERVATION & REHABILITATION BOND (CONDITION 28)

The Conservation and Rehabilitation Bond Calculation Review Report (Conacher Consulting September 2022) was prepared to address Condition No. 28 of Schedule 3 of the approval. This Report calculated that the Conservation and Rehabilitation Bond be set at $335,000.00. This figure has been accepted by the Department of Planning and Environment. The financial arrangements for the rehabilitation bond have been finalised.

A recalculation of the Rehabilitation Bond amount is due within the 2024 monitoring period as per Condition 29.

TABLE 3.1 LANDSCAPE & REHABILITATION MANAGEMENT PLAN COMPLIANCE DETAILS							
Unique ID	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
LRMP (v2 - 2019) Landscape Buffer Area Management Actions No.1-4	Earth Mound & Bund Construction & Management	1.Progressively construct bund and earth mound around quarry pit	Operational / progressive as quarrying occurs	Visual site inspection and aerial photograph inspection	Annual mapping of bund and earth mound locations	Western mound constructed Revegetation underway	Revegetation to be monitored.
		2.Vegetate bund and mound areas with Kikuyu Grass or other suitable species	Operational / progressive as bunds and mounds are constructed	Visual inspection by Project Environmental Consultant	Documentation in monitoring reports	Revegetation commenced & ongoing	Control weeds on mounds to assist further revegetation
		3.Construct and maintain sandstone block bund around Aboriginal archaeological site RE1	Prior to operation	Subject to monitoring by the project Archaeologist.	Refer to Environmental Plan of Management & Aboriginal Cultural Heritage Management Plan	Block placement implemented	Monitor and report. Monitor fence condition
		4.Implement downslope sediment controls for bunds and mounds until they are vegetated	Operational / progressive as bunds and mounds are constructed	Visual inspection	Annual monitoring reporting	Bunds are in process of revegetation	Monitor and report.
LRMP (v2 - 2019) Landscape Buffer Area Management Action No. 5-6	Tree Protection	5.Survey trees to be retained within the Landscape Buffer Area in close proximity to earth mounds	Operational / Years 4-6	Initial survey and further visual inspection	Initial mapping of tree locations and monitoring reporting	Some trees have died or storm damaged.	Monitor and report for management/replacement actions.

TABLE 3.1 LANDSCAPE & REHABILITATION MANAGEMENT PLAN COMPLIANCE DETAILS							
Unique ID	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
		6.Provide protection for trees to be retained in the landscape buffer during bund construction	Operational / for life of the quarry	Visual inspection by Project Environmental Consultant	Annual Reporting	Trees to be retained which are not protected by existing site fencing are shown in Figure 3.1.	None required.
LRMP (v2 - 2019) Landscape Buffer Area Management Actions No. 7-9	Aboriginal Archaeological Site Management	7.Maintain fencing and sandstone bund around Aboriginal archaeological site RE1	Operational / for the life of the quarry	Subject to monitoring by the project Archaeologist.	Refer to Environmental Plan of Management & Aboriginal Cultural Heritage Management Plan	NA	NA
		8.Maintain vehicle access diversion around Aboriginal archaeological site RE2	Operational / for the life of the quarry	As above.	As above.	NA	NA
		9.Implement Aboriginal Cultural Heritage Program	Operational / for the life of the quarry	As above.	As above.	NA	NA

TABLE 3.1 LANDSCAPE & REHABILITATION MANAGEMENT PLAN COMPLIANCE DETAILS							
Unique ID	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Action**					
LRMP (v2 - 2019) Landscape Buffer Area Management Action No. 10	Access Management	10.Ensure that common boundary fencing adjoining the Biodiversity Offset Areas and Aboriginal archaeological heritage sites is maintained	Operational for the life of the quarry	Project Ecologist inspection and annual monitoring reporting	Annual reporting	Compliant for Biodiversity Offset Areas. Refer to separate monitoring by Project Archaeologist for protection of Aboriginal Heritage Sites	None required
LRMP (v2 - 2019) Landscape Buffer Area Management Action No. 11	Bushfire Hazard Reduction & Weed Management	11. Undertake bushfire hazard reduction and weed management through grazing and slashing of the landscape buffer.	Operational for the life of the quarry	Project Ecologist inspection and annual monitoring reporting	Annual reporting	Compliance, the landscape buffer has been slashed and grazed by cattle.	Continue ongoing grazing and slashing program
LRMP (v2 - 2019) Landscape Buffer Area Management Action No. 12	Rubbish Management	12.Monitor for rubbish accumulations and remove as necessary	Operational for the life of the quarry	Visual inspection by Project Environmental Consultant	Annual reporting	Compliant	None required

TABLE 3.2 QUARRY REHABILITATION OBJECTIVES							
Unique ID	**Compliance Requirement**		**Development Phase**	**Monitoring Methodology**	**Evidence Required**	**Monitoring Results**	**Improvement Measures Required**
	Task	**Objective**					
Quarry Area Rehabilitation Plan Actions 1-4	Site	-Safe, stable and non-polluting -Minimise the visual impact of the final landforms as far as is reasonable and feasible	Operation / progressive and post operation	-Land survey -Observation by suitably qualified Environmental Consultant	Record within quarry operation procedures and annual monitoring reports	Rehabilitation not required during current monitoring period	None required.
	Surface Infrastructure	To be decommissioned and removed unless the Secretary agrees otherwise	Post operation	-Observation by suitably qualified Environmental Consultant	As above	As above	None required.
	Quarry Benches	Suitably landscaped and revegetated using native species	Operation / progressive and post operation	-Observation by suitably qualified Environmental Consultant	As above	As above	None required.
	Quarry Pit Floor	Establish land with a level floor of at least Class 4 agricultural suitability over 80% of the quarry floor	Operation / progressive and post operation	-Observation by suitably qualified Environmental Consultant	As above	As above	None required.

SECTION 4

CONCLUSIONS & RECOMMENDATIONS

4.1 CONCLUDING COMMENTS

The Project is compliant with the requirements of the current Landscape and Rehabilitation Management Plan and Biodiversity Offset Management & Habitat Rehabilitation Plan prepared in compliance with the Conditions for the current Project Approval.

The progressive implementation of these plans is being undertaken as required.

A revision to the current format of the monitoring reports for the Landscape and Rehabilitation Management Plan and Biodiversity Offset Management Plan documents would provide a monitoring report format more suitably aligned to the approval conditions 19 – 29 of Schedule 3. This would provide for a separate report to address the Biodiversity and the Landscape categories as individual reports.

An evaluation of the development stages of the resource extraction, requirements for disturbed area revegetation, landscape rehabilitation and the Conservation and Rehabilitation Bond (Condition 29) should be undertaken during the 2024 monitoring period.

Additional ongoing maintenance/replacement of the fauna nest boxes is to be undertaken during the 2024 monitoring period.

The 2024 Annual Report is to provide an analysis of the revegetation and weed management works undertaken as identified in the BOMHRP and LRMP.

4.2 MONITORING AND REPORTING RECOMMENDATIONS

Following the completion of the monitoring and reporting for the 2023 works undertaken it is recommended that:

I. The 2024 Annual Monitoring Report should provide a separate report for the Biodiversity matters (Schedule 3 Conditions 23 and 24) and the Landscape matters (Schedule 3 Conditions 25, 26, 27, 28 29).
II. The Conservation and Rehabilitation Bond (2022) is to be revised to address the ongoing requirements of Condition 29 in relation to the timing of the Independent Environmental Audit required during this reporting period.

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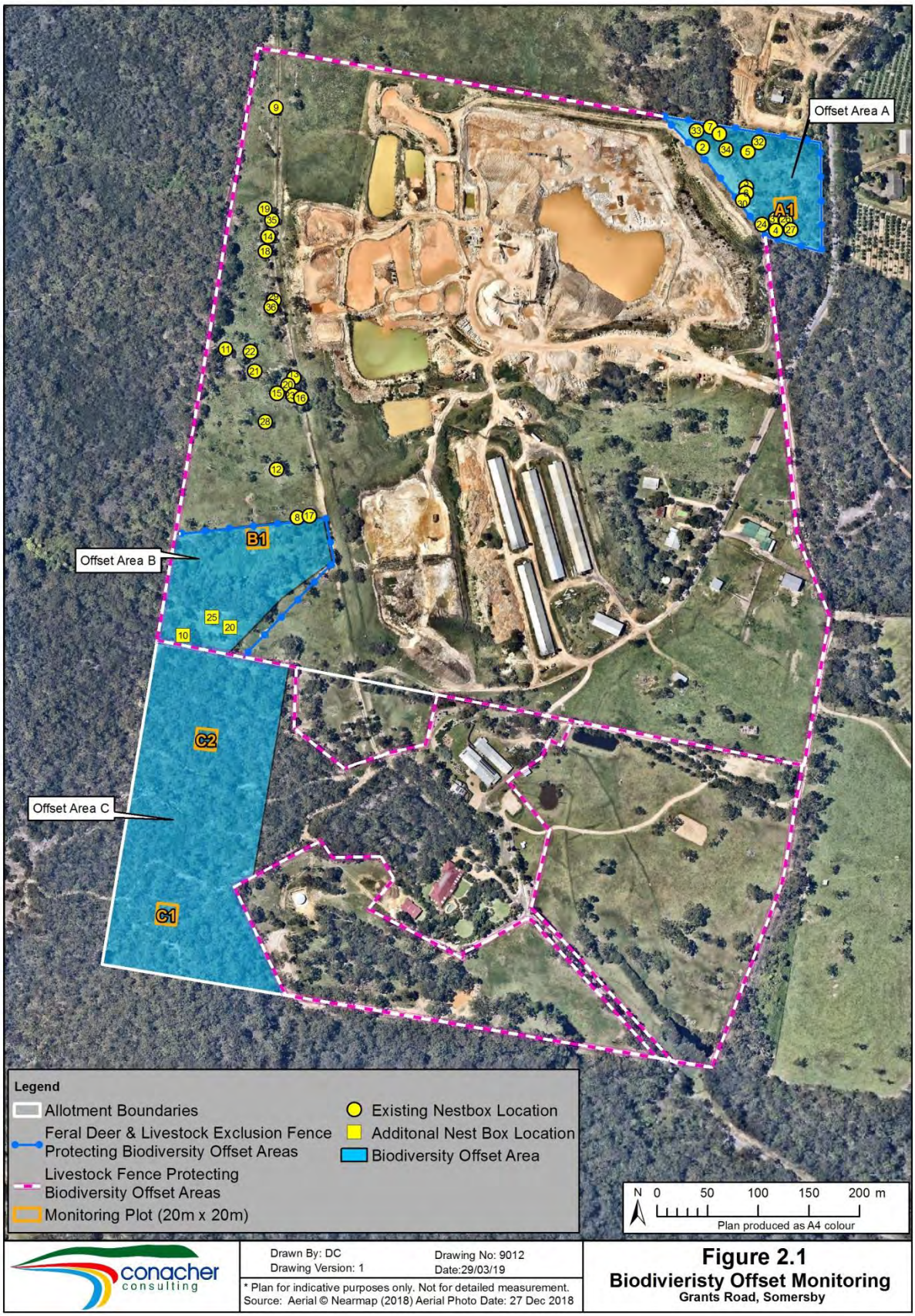
REFERENCES

Conacher Consulting (November 2019 Ref 9045/V2) Biodiversity Offset Management & Habitat Rehabilitation Plan, Grants Road Sand Quarry Extension. Unpublished Report.

Conacher Consulting (November 2019 Ref 9020V1) Landscape and Rehabilitation Management Plan Version 2 Grants Road Sand Quarry Extension. Unpublished Report.

Conacher Consulting (September 2022 Ref 22001/2) Conservation and Rehabilitation Bond (2022 Review) Grants Road Sand Quarry

APPENDIX 1
FIGURES


Offset Area A
A1
Offset Area B
B1
Offset Area C
C2
C1
Legend
Allotment Boundaries
Feral Deer & Livestock Exclusion Fence Protecting Biodiversity Offset Areas
Livestock Fence Protecting Biodiversity Offset Areas
Monitoring Plot (20m x 20m)
Existing Nestbox Location
Additonal Nest Box Location
Biodiversity Offset Area
N 0 50 100 150 200 m
Plan produced as A4 colour
conacher consulting
Drawn By: DC
Drawing Version: 1
Drawing No: 9012
Date:29/03/19
* Plan for indicative purposes only. Not for detailed measurement.
Source: Aerial © Nearmap (2018) Aerial Photo Date: 27 Dec 2018
Figure 2.1
Biodivieristy Offset Monitoring
Grants Road, Somersby

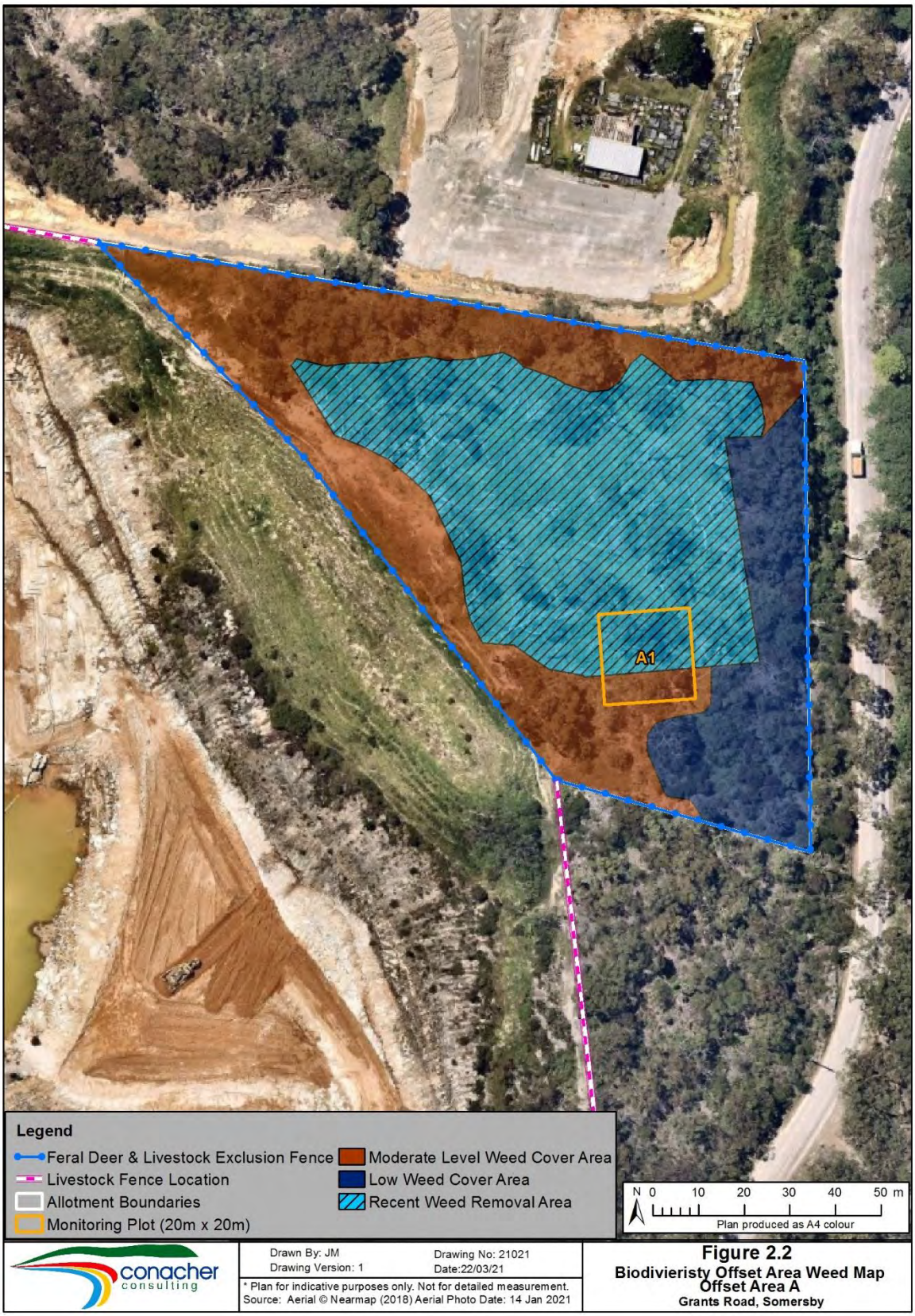
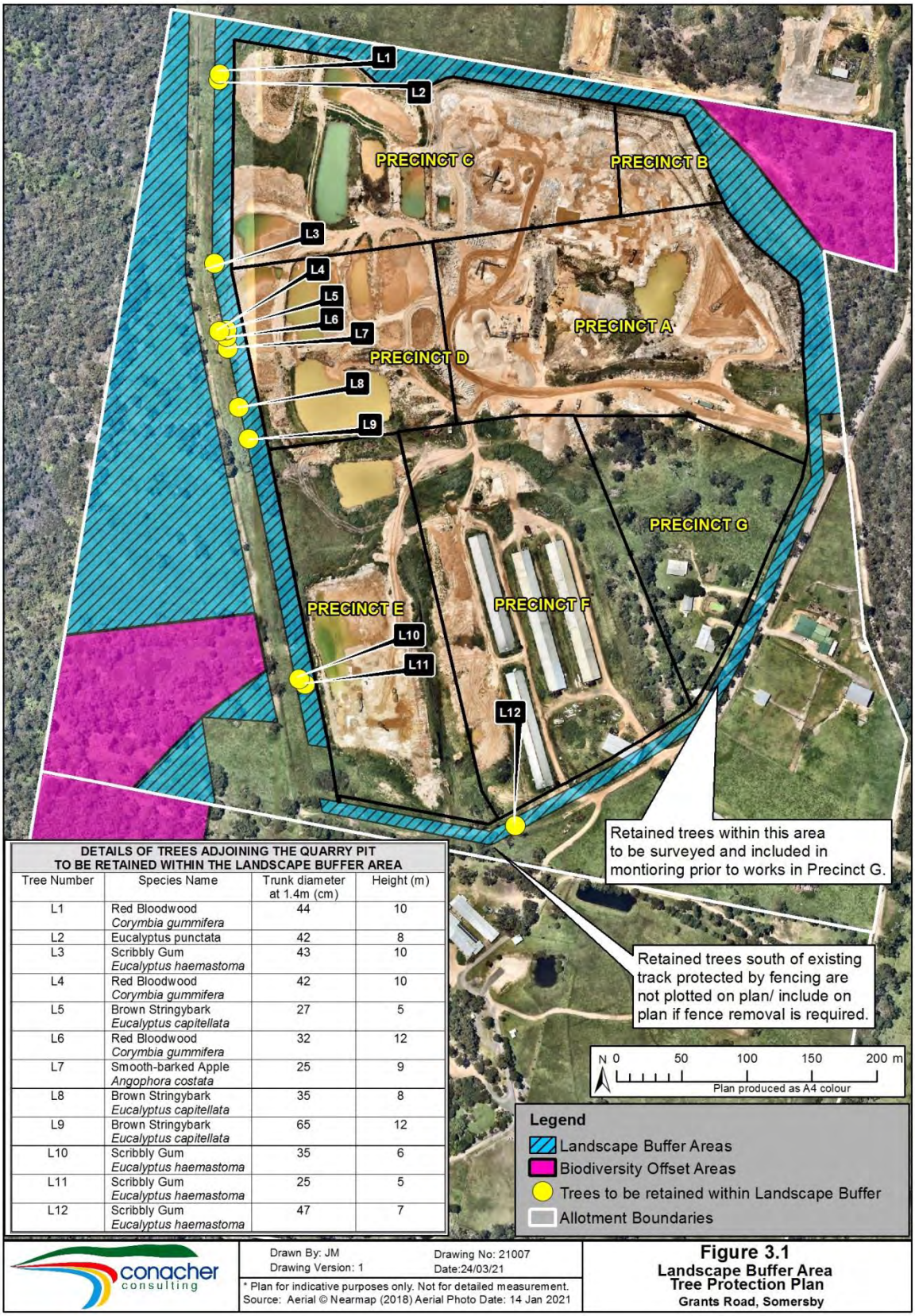


Figure 2.2
Biodivieristy Offset Area Weed Map
Offset Area A
Grants Road, Somersby

Figure 2.3
Biodiversity Offset Area Weed Map
Offset Area B
Grants Road, Somersby

Figure 2.4
Biodiversity Offset Area Weed Map
Offset Area C
Grants Road, Somersby



DETAILS OF TREES ADJOINING THE QUARRY PIT TO BE RETAINED WITHIN THE LANDSCAPE BUFFER AREA

Tree Number	Species Name	Trunk diameter at 1.4m (cm)	Height (m)
L1	Red Bloodwood *Corymbia gummifera*	44	10
L2	Eucalyptus punctata	42	8
L3	Scribbly Gum *Eucalyptus haemastoma*	43	10
L4	Red Bloodwood *Corymbia gummifera*	42	10
L5	Brown Stringybark *Eucalyptus capitellata*	27	5
L6	Red Bloodwood *Corymbia gummifera*	32	12
L7	Smooth-barked Apple *Angophora costata*	25	9
L8	Brown Stringybark *Eucalyptus capitellata*	35	8
L9	Brown Stringybark *Eucalyptus capitellata*	65	12
L10	Scribbly Gum *Eucalyptus haemastoma*	35	6
L11	Scribbly Gum *Eucalyptus haemastoma*	25	5
L12	Scribbly Gum *Eucalyptus haemastoma*	47	7

conacher consulting

Drawn By: JM
Drawing Version: 1
Drawing No: 21007
Date:24/03/21

* Plan for indicative purposes only. Not for detailed measurement.
Source: Aerial © Nearmap (2018) Aerial Photo Date: 14 Jan 2021

Figure 3.1
Landscape Buffer Area Tree Protection Plan
Grants Road, Somersby

APPENDIX 2
MONITORING PHOTOGRAPHS

Monitoring Plot A1 – View to the north

Monitoring Plot A1 – View to the east

Monitoring Plot A1 – View to the south

Monitoring Plot A1 View to the west

Monitoring Plot B1 - View to the north

Monitoring Plot B1 View to the east

Monitoring Plot B1 View to the south

Monitoring Plot B1 – View to the west

Monitoring Plot C1 - View to the north

Monitoring Plot C1 - View to the east

Monitoring Plot C1 - View to the south

Monitoring Plot C1 - View to the west

Monitoring Plot C2 - View to the north

Monitoring Plot C2 - View to the east

Monitoring Plot C2 - View to the south

Monitoring Plot C2 -View to the west

APPENDIX 3
NEST BOX ANNUAL MONITORING RESULTS

TABLE A3.1 NEST BOX MONITORING RESULTS				
Nest Box Number	**Type**	**Maintenance Required**	**Easting**	**Northing**
1	Side Entry Very Small Bird / Mammal	Replaced	338720	6304269
2	Side Entry Very Small Bird / Mammal	None	338704	6304256
3	Side Entry Small Bird / Mammal (narrow box)	None	338747	6304216
4	Side Entry Small Bird / Mammal	None	338795	6304164
5	Front Entry Small Bird / Mammal (short box)	None	338746	6304252
6	Front Entry Small Bird / Mammal (short box)	None	338747	6304211
7	Front Entry Small Bird / Mammal (short box)	None	338711	6304276
8	Front Entry Small Bird / Mammal (short box)	None	338303	6303890
9	Front Entry Small Bird / Mammal	None	338282	6304295
10	Front Entry Small Bird / Mammal	None	338756	6304320
11	Front Entry Small Bird / Mammal	None	338232	6304056
12	Front Entry Small Bird / Mammal	Repair	338283	6303937
13	Front Entry Small Bird / Mammal	Replaced	338300	6304028
14	Front Entry Small Bird / Mammal	None	338274	6304168
15	Front Entry Small Bird / Mammal	Replaced	338294	6304021
16	Front Entry Small Bird / Mammal	None	338307	6304008
17	Front Entry Small Bird / Mammal	Repair	338303	6303890
18	Side Entry Small Bird / Mammal	None	338272	6304153
19	Side Entry Small Bird / Mammal	None	338278	6304184
20	Side Entry Small Bird / Mammal	Replaced	338294	6304021
21	Side Entry Small Bird / Mammal	None	338261	6304035
22	Side Entry Small Bird / Mammal	None	338257	6304054
23	Side Entry Small Bird / Mammal	Replaced	338299	6304011

TABLE A3.1 NEST BOX MONITORING RESULTS				
Nest Box Number	**Type**	**Maintenance Required**	**Easting**	**Northing**
24	Side Entry Very Small Bird / Mammal	None	338769	6304184
25	Front Entry Small Bird / Mammal	None	338760	6304210
26	Side Entry Very Smal l Bird / Mammal	None	338786	6304184
27	Front Entry Small Bird / Mammal	None	338786	6304184
28	Side Entry Small Bird / Mammal	None	338272	6303985
29	Side Entry Small Bird / Mammal	None	338280	6304105
30	Front Entry Small Bird / Mammal	None	338743	6304203
31	Side Entry Very Small Bird / Mammal (Horizontal mount)	Replaced	338776	6304185
32	Side Entry Very Small Bird / Mammal (Horizontal mount)	None	338759	6304261
33	Side Entry Very Small Bird / Mammal (Horizontal mount)	None	338697	6304272
34	Side Entry Very Small Bird / Mammal (Horizontal mount)	None	338727	6304253
35	Natural Log Rear Entry Bat box	None	338278	6304184
36	Natural Log Rear Entry Bat box	None	338277	6304098

APPENDIX 4
BIODIVERSITY OFFSET MONITORING PLOT DATA

The floristic plot data for each of the Biodiversity Offset Areas (A-C) is provided in Table A4.1 (Areas A & B) and Table A4.2 (Area C).

TABLE A4.1
FLORISTIC DATA FOR BIODIVERSITY OFFSET AREAS A & B

Family	Scientific Name	Common Name	Plot A1 Cover	Plot B1 Cover
Trees				
Myrtaceae	*Corymbia gummifera*	Red Bloodwood	3.00	
Myrtaceae	*Eucalyptus capitellata*	Brown Stringybark	5.00	
Myrtaceae	*Eucalyptus haemastoma*	Broad-leaved Scribbly Gum		2.00
Myrtaceae	*Eucalyptus sieberi*	Silvertop Ash	2.00	
Phyllanthaceae	*Glochidion ferdinandi*	Cheese Tree	0.1	
Proteaceae	*Banksia serrata*	Old-man Banksia	3.00	
Shrubs				
Araliaceae	*Polyscias sambucifolia* subsp. *Long Leaflets*	Elderberry Panax	0.10	
Asteraceae	*Ozothamnus diosmifolius*	White Dogwood	10.00	
Dilleniaceae	*Hibbertia linearis*		0.10	
Fabaceae (Faboideae)	*Bossiaea heterophylla*	Variable Bossiaea	0.10	
Fabaceae (Faboideae)	*Bossiaea obcordata*	Spiny Bossiaea	0.10	
Fabaceae (Mimosoideae)	*Acacia fimbriata*	Fringed Wattle	0.50	
Fabaceae (Mimosoideae)	*Acacia floribunda*	White Sally	0.25	
Myrtaceae	*Kunzea ambigua*	Tick Bush	0.25	
Myrtaceae	*Leptospermum polygalifolium* subsp. *polygalifolium*	Tantoon		20.00
Phyllanthaceae	*Breynia oblongifolia*	Coffee Bush	0.10	
Proteaceae	*Banksia ericifolia*	Heath-leaved Banksia		1.00
Proteaceae	*Banksia oblongifolia*	Fern-leaved Banksia		0.50
Proteaceae	*Lomatia silaifolia*	Crinkle Bush	0.10	
Thymelaeaceae	*Pimelea linifolia*	Slender Rice Flower	0.10	
Forbs				
Amaranthaceae	*Alternanthera denticulata*	Lesser Joyweed		0.20
Apiaceae	*Hydrocotyle laxiflora*	Stinking Pennywort	0.10	
Asteraceae	*Euchiton sphaericus*	Star Cudweed	0.10	
Commelinaceae	*Commelina cyanea*	Native Wandering Jew	0.10	
Convolvulaceae	*Dichondra repens*	Kidney Weed	0.10	
Plantaginaceae	*Veronica plebeia*	Trailing Speedwell	0.10	
Polygonaceae	*Persicaria lapathifolia*	Pale Knotweed		20.00
Dennstaedtiaceae	*Hypolepis muelleri*	Harsh Ground Fern	0.50	0.25
Dennstaedtiaceae	*Pteridium esculentum*	Bracken	0.25	
Monocots				
Cyperaceae	*Cyathochaeta diandra*		0.25	
Cyperaceae	*Cyperus polystachyos*		1.00	2.00
Cyperaceae	*Gahnia clarkei*	Tall Saw-sedge	0.10	
Juncaceae	*Juncus usitatus*		0.20	
Lomandraceae	*Lomandra gracilis*		0.10	

TABLE A4.1 FLORISTIC DATA FOR BIODIVERSITY OFFSET AREAS A & B				
Family	**Scientific Name**	**Common Name**	**Plot A1 Cover**	**Plot B1 Cover**
Poaceae	*Cynodon dactylon*	Common Couch	20.00	
Poaceae	*Echinopogon caespitosus*	Bushy Hedgehog-grass	0.25	
Poaceae	*Entolasia marginata*	Bordered Panic	0.10	10.00
Poaceae	*Entolasia stricta*	Wiry Panic	2.00	
Poaceae	*Eragrostis brownii*	Brown's Lovegrass	10.00	
Poaceae	*Microlaena stipoides var. stipoides*	Weeping Grass	10.00	
Poaceae	*Oplismenus imbecillis*	Creeping Beard Grass	0.20	
Poaceae	*Sacciolepis indica*	Indian Cupscale Grass		0.50
Other Native Plants				
Rubiaceae	*Gynochthodes jasminoides*	Sweet Morinda		0.25
Vitaceae	*Cissus hypoglauca*	Giant Water Vine		0.25
Exotic Plants				
Araceae	*Zantedeschia aethiopica*	Arum Lily		5.00
Asteraceae	*Ageratina adenophora*	Crofton Weed	1.00	30.00
Asteraceae	*Bidens pilosa*	Cobbler's Pegs	0.10	
Asteraceae	*Conyza bonariensis*	Flaxleaf Fleabane	0.10	
Asteraceae	*Conyza sumatrensis*	Tall fleabane	1.00	0.10
Asteraceae	*Gamochaeta americana*	Cudweed	0.10	
Asteraceae	*Hypochaeris radicata*	Catsear	0.10	
Asteraceae	*Senecio madagascariensis*	Fireweed	0.25	0.10
Asteraceae	*Sonchus asper*	Prickly Sowthistle		0.10
Brassicaceae	*Rorippa microphylla*	One-rowed Watercress		0.10
Cyperaceae	*Cyperus aggregatus*		0.10	
Cyperaceae	*Cyperus congestus*		0.10	1.00
Poaceae	*Andropogon virginicus*	Whiskey Grass	15.00	
Poaceae	*Axonopus fissifolius*	Narrow-leafed Carpet Grass	20.00	
Poaceae	*Cenchrus clandestinus*	Kikuyu Grass	5.00	
Poaceae	*Digitaria sanguinalis*	Crab Grass	0.10	0.25
Poaceae	*Echinochloa crus-galli*	Barnyard Grass		0.20
Poaceae	*Paspalum dilatatum*	Paspalum	5.00	
Poaceae	*Paspalum notatum*	Bahia Grass	1.00	
Poaceae	*Setaria parviflora*	Pigeon Grass	0.10	
Poaceae	*Setaria pumila*	Pale Pigeon Grass		1.00
Polygonaceae	*Acetosella vulgaris*	Sheep Sorrel	0.10	
Rosaceae	*Rubus fruticosus* sp. agg.	Blackberry complex	5.00	0.1
Solanaceae	*Solanum mauritianum*	Wild Tobacco Bush	1.00	0.50
Solanaceae	*Solanum nigrum*	Black-berry Nightshade	0.10	0.10
Verbenaceae	*Lantana camara*	Lantana	0.50	1.00
Verbenaceae	*Verbena bonariensis*	Purpletop	0.10	0.10

TABLE A4.2 FLORISTIC DATA FOR BIODIVERSITY OFFSET AREA C				
Family	**Scientific Name**	**Common Name**	**Plot C1 Cover**	**Plot C2 Cover**
Canopy				
Myrtaceae	*Corymbia gummifera*	Red Bloodwood	5	10
Myrtaceae	*Eucalyptus haemastoma*	Scribbly Gum	10	
Myrtaceae	*Eucalyptus piperita*	Sydney Peppermint		15
Myrtaceae	*Eucalyptus sieberi*	Silvertop Ash	20	10
Sub-canopy				
Myrtaceae	*Angophora costata*	Smooth-barked Apple	5	1
Proteaceae	*Banksia ericifolia subsp. ericifolia*	Heath-leaved Banksia	3	2
Proteaceae	*Banksia serrata*	Old Man Banksia	1	1
Shrubs				
Apiaceae	*Platysace linearifolia*		15	2
Apiaceae	*Xanthosia pilosa*	Woolly Xanthosia		0.3
Apiaceae	*Xanthosia tridentata*	Rock Xanthosia		1
Dilleniaceae	*Hibbertia bracteata*			1
Dilleniaceae	*Hibbertia empetrifolia subsp. empetrifolia*		0.1	0.2
Dilleniaceae	*Hibbertia linearis*		5	
Dilleniaceae	*Hibbertia procumbens*			0.2
Euphorbiaceae	*Amperea xiphoclada* var. *xiphoclada*	Broom Spurge	1	0.5
Ericaceae	*Leucopogon ericoides*	Pink Beard-heath	2	
Ericaceae	*Woollsia pungens*			3
Fabaceae (Faboideae)	*Bossiaea heterophylla*	Variable Bossiaea	2	0.5
Fabaceae (Faboideae)	*Bossiaea obcordata*	Spiny Bossiaea	0.25	0.5
Fabaceae (Faboideae)	*Bossiaea scolopendria*		0.1	
Fabaceae (Faboideae)	*Dillwynia rudis*		3	4
Fabaceae (Faboideae)	*Hovea linearis*			0.1
Fabaceae (Faboideae)	*Pultenaea rosmarinifolia*	Rosemary Bush-pea		2
Fabaceae (Mimosoideae)	*Acacia linifolia*	White Wattle	3	3
Fabaceae (Mimosoideae)	*Acacia myrtifolia*	Myrtle Wattle		0.2
Fabaceae (Mimosoideae)	*Acacia oxycedrus*	Spike Wattle	0.1	0.25
Fabaceae (Mimosoideae)	*Acacia suaveolens*	Sweet Wattle	0.2	1
Fabaceae (Mimosoideae)	*Acacia terminalis* subsp. *Bright yellow flower*	Sunshine Wattle		0.25
Lamiaceae	*Hemigenia purpurea*		0.25	
Myrtaceae	*Leptospermum parvifolium*			1
Myrtaceae	*Leptospermum polygalifolium* subsp. *cismontanum*	Tantoon		5
Myrtaceae	*Leptospermum trinervium*	Flaky-barked Tea-tree	10	10
Phyllanthaceae	*Phyllanthus hirtellus*	Thyme Spurge	0.3	0.2
Proteaceae	*Banksia ericifolia subsp.*	Heath-leaved	1	5

TABLE A4.2 FLORISTIC DATA FOR BIODIVERSITY OFFSET AREA C				
Family	**Scientific Name**	**Common Name**	**Plot C1 Cover**	**Plot C2 Cover**
	ericifolia	Banksia		
Proteaceae	*Banksia oblongifolia*	Fern-leaved Banksia		0.5
Proteaceae	*Banksia serrata*	Old Man Banksia	2	
Proteaceae	*Conospermum longifolium* subsp. *longifolium*	Long Leaf Smoke Bush	2	2
Proteaceae	*Grevillea buxifolia subsp. buxifolia*	Grey Spider Flower	5	1
Proteaceae	*Grevillea sericea subsp. sericea*	Pink Spider Flower	5	10
Proteaceae	*Hakea sericea*	Needlebush		3
Proteaceae	*Isopogon anemonifolius*	Broad-leaf Drumsticks	0.5	0.25
Proteaceae	*Lambertia formosa*	Mountain Devil	0.1	0.5
Proteaceae	*Lomatia silaifolia*	Crinkle Bush		0.25
Proteaceae	*Persoonia isophylla*	Pine-leaved Geebung	10	1
Proteaceae	*Persoonia levis*	Broad-leaved Geebung	0.5	1
Proteaceae	*Petrophile pulchella*		0.25	0.25
Rutaceae	*Boronia ledifolia*	Showy Boronia	0.5	4
Rutaceae	*Boronia pinnata*			0.2
Rutaceae	*Philotheca hispidula*		0.5	0.25
Santalaceae	*Leptomeria acida*	Sour Currant Bush		1
Thymelaeaceae	*Pimelea linifolia* subsp. *linifolia*	Slender Rice Flower	5	2
Ground Layer				
Ferns and Allies				
Schizaeacea	*Schizaea bifida*	Comb Fern		0.1
Lindsaeaceae	*Lindsaea linearis*	Screw Fern		0.1
Herbs - Climbers				
Smilacaceae	*Smilax australis*	Native Sarsparilla		0.2
Dicots (Herbs)				
Apiaceae	*Actinotus helianthi*	Flannel Flower	5	
Apiaceae	*Actinotus minor*	Lesser Flanner Flower	0.2	10
Goodeniaceae	*Dampiera stricta*			0.2
Goodeniaceae	*Scaevola ramosissima*	Snake Flower	0.2	
Rubiaceae	*Pomax umbellata*		0.2	
Monocots (Grasses)				
Poaceae	*Anisopogon avenaceus*	Oat Speargrass	5	20
Poaceae	*Entolasia stricta*	Wiry Panic	15	15
Poaceae	*Eragrostis brownii*	Brown's Lovegrass		0.2
Monocots (Others)				
Anthericaceae	*Caesia parviflora*	Pale Grass-lily	0.1	
	Thysanotus tuberosus	Common Fringe Lilly	0.1	
Cyperaceae	*Caustis flexuosa*	Curly Wig	0.2	1
Cyperaceae	*Caustis pentandra*	Thick Twist Rush		0.2

TABLE A4.2 FLORISTIC DATA FOR BIODIVERSITY OFFSET AREA C				
Family	**Scientific Name**	**Common Name**	**Plot C1 Cover**	**Plot C2 Cover**
Cyperaceae	*Cyathochaeta diandra*		1	10
Cyperaceae	*Lepidosperma laterale*			0.1
Cyperaceae	*Schoenus melanostachys*	Black Bog-rush		5
Doryanthaceae	*Doryanthes excelsa*	Gymea Lily		5
Haemodoraceae	*Haemodorum planifolium*		1	0.4
Iridaceae	*Patersonia sericea*	Silky Purple-flag	0.1	
Lomandraceae	*Lomandra glauca*	Pale Mat-rush	0.1	
Lomandraceae	*Lomandra obliqua*		0.1	0.1
Orchidaceae	*Cryptostylis erecta*	Bonnet orchid	0.1	
Phormiaceae	*Dianella prunina*		0.1	0.1
Restionaceae	*Empodisma minus*	Wire Rush		0.3
Restionaceae	*Lepyrodia scariosa*		0.1	1
Xanthorrhoeaceae	*Xanthorrhoea media*		4	0.4
Xyridaceae	*Xyris gracilis*			0.3
Exotics				
Poaceae	*Andropogon virginicus**	Whisky Grass		0.1

Appendix 10
COMMUNITY CONSULTATION
The Department of Planning

COMMUNITY CONSULTATIVE COMMITTEE
MINUTES OF THE MEETING HELD TUESDAY 11TH JULY 2023
AT SOMERSBY GARDENS ESTATE

	NAME	ORGANISATION
PRESENT	Lisa Andrews (LA)	Independent Chairperson
	Steven Jones (SJ)	Grants Rd Quarry
	Leanne Jones (LJ)	Grants Rd Quarry
	John Birkett (JB)	Community Representative
	Brett Eddy (BE)	Central Coast Council representative
	Jeffrey Gay (JG)	Community Representative
	Charles Sammut (CS)	Community Representative

<table>
<tr><td>WELCOME & INTRODUCTIONS</td><td>The chair opened the meeting at 2pm, welcoming all present.</td><td></td></tr>
<tr><td>APOLOGIES</td><td>Nil.</td><td></td></tr>
<tr><td>DECLARATION OF INTEREST</td><td>LA declared that she is an approved Independent Chairperson with the Department of Planning, appointed by the Secretary to chair this CCC and engaged by Grants Rd Sand.</td><td>No changes to members' previous declarations.</td></tr>
<tr><td>BUSINESS ARISING</td><td>There was 1 actions item from the previous meeting:
<table>
<tr><th>ITEM</th><th>ISSUE</th><th>RESPONSIBILITY</th></tr>
<tr><td>1</td><td>SJ to provide a link to the IEA when submitted to DPE.</td><td>SJ/LA</td></tr>
</table>
Link: Grants Road Quarry (grantsrdsand.com.au)

No other business arising.</td><td>See Link:</td></tr>
<tr><td>CORRESPONDENCE</td><td>As per correspondence report sent out with the meeting notice on 15/6/23:
29/6/21 - Email to members with the draft minutes for review and the correspondence from CC Council regarding the Piles Rd design and roadworks.
7/7/21 – Email to members with the finalised minutes.
7/7/21 – Same information posted to JB.
14/4/23 - Email complaint from local resident regarding hammering activities occurring on site.
28/4/23 – Response to complainant from Grant Rd Quarry advising of no change.
15/6/23 – Email to members with the meeting notice, agenda and correspondence report for this CCC.
15/6/23 – Letter to JB & CS with the same information.</td><td>Accepted.</td></tr>
</table>

REPORT/PROJECT UPDATE	• SJ advised that the quarry has had a productive year and continues to operate in accordance with its approval. • There was one anonymous complaint received via the chair alleging increased frequency of rock hammering being conducted at the quarry. This was forwarded through to Grants Rd Sand for investigation/advice. A response was provided to the chair advising that hammering has not moved closer or changed. Block production has remained the same for the last 4 years. Further that annual sound monitoring for the quarry operations has always been within the criteria outlined in the EPA licence and DPE conditions of consent. The complainant was offered an "olive branch" to contact the company directly with any concerns. The chair forwarded this information through to the complainant, however, no further contact has been forthcoming. Accordingly, this complaint was closed off. • No environmental issues. • No safety issues. • The Annual Review was completed and lodged with DPE, who has accepted the report. • The EPA Report has been lodged providing all monitoring/compliance reports for dust & noise, as per the licence conditions. • All legislative information, including annual review, Independent Environmental Audits (every 3 years), management plans, complaints register, noise/dust monitoring reports are available on the project website. • SJ advised that personal dust level monitoring is carried out on relevant staff to record respiratory and inhalable dust. This is conducted by an independent company, who attach monitors on suites/apparel to record exposure to dust and this is reportable to the EPA. • Staff also have biennial health checks, including chest x-rays, etc.	
GENERAL BUSINESS	• JG enquired about road shoulder works being carried out by Council near the Keighley Avenue Intersection. It appears that the edges are being cambered/reshaped to re-direct water to the table drains and away from the pavement. BE concurred that this was very likely to protect the underlying pavement.	
NEXT MEETING	Given there are no issues, environmental concerns or complaints with the operation of the quarry, it was agreed by members to continue with an annual CCC meeting.	**Agreed**

	Should there be any need to convene the CCC at any time, the chair will call an extraordinary meeting at the request of any community member. The next meeting of the CCC was scheduled for **Tuesday 9 July 2024**, commencing at 2pm.	

Meeting closed at 2.23pm with LA thanking all for their attendance.

No Action Items.

Appendix 11
PRODUCT TRANSPORT RECORDS
Grants Road Sand Quarry

Date	Time	Tonne	Docket Number	Total Tonnes
		January		
3/1/23	8.30	2.15	61763	9,789.17
	7.45	11.50	61764	
	9.05	11.90	61765	
	12.04	2.40	9563	
	7.29	2.40	9614	
4/1/23	7.10	33.60	66184	
	7.50	33.52	66185	
	8.30	33.54	66186	
	9.10	33.54	66187	
	9.30	13.00	66188	
	10.00	13.00	66189	
5/1/23	7.00	33.56	66190	
	7.40	33.56	66191	
	8.20	33.50	66192	
	9.00	33.52	66193	
	8.00	32.36	61766	
	9.15	32.82	61767	
	14.50	33.02	61768	
	8.58	13.00	9564	
	10.36	24.00	9565	
6/1/23	7.00	33.58	66194	
	7.40	33.54	66195	
	8.20	33.50	66196	
	9.00	33.50	66197	
	9.40	33.54	66198	
	10.20	33.56	66199	
9/1/23	7.00	7.80	66200	
	7.00	33.56	61769	
	7.40	33.62	61770	
	8.20	33.52	61771	
	9.00	33.54	61772	
	9.40	33.50	61773	
	10.20	33.54	61774	
	8.00	15.00	9566	
	8.45	15.00	9566	
	9.28	15.00	9566	
	10.15	15.00	9566	
	10.58	15.00	9566	
	11.35	15.00	9566	
	12.25	15.00	9566	
	13.05	15.00	9566	
	13.45	15.00	9566	
	14.25	15.00	9566	
	14.55	15.00	9566	
	15.30	15.00	9566	
	15.30	15.00	9566	
	16.10	15.00	9566	
	16.10	15.00	9566	
	16.10	15.00	9566	
	16.50	15.00	9566	
	17.00	15.00	9566	
	14.26	4.30	9567	
10/1/23	7.00	33.52	61775	
	7.10	33.56	61776	
	7.40	33.56	61777	
	7.50	33.00	61778	
	8.20	33.50	61779	
	9.00	33.52	61780	
	9.00	33.50	61781	
	9.10	33.00	61782	
	10.30	33.50	61783	
	10.40	33.00	61784	
	11.50	33.50	61785	
	13.20	33.50	61786	
	14.10	33.60	61787	
	14.50	33.54	61788	
	15.30	33.52	61789	
	16.10	33.54	61790	
	10.50	9.00	65488	
	10.30	17.28	65489	
	8.57	13.66	9568	
11/1/23	7.00	33.60	61791	
	7.50	33.54	61792	
	8.30	33.56	61793	
	9.00	33.58	61794	
	9.40	33.52	61795	
	10.20	33.54	61796	
	11.10	33.50	61797	
	12.00	33.50	61798	
	12.40	33.54	61799	
	13.20	33.58	61800	
	7.11	39.52	65490	
	8.30	38.26	65491	
	13.10	32.50	65492	
	13.37	10.86	65493	
	16.40	38.86	65494	
	7.10	4.80	9569	
12/1/23	7.20	38.08	65495	

Date	Time	Tonne	Docket Number	Total Tonnes
		February		
1/2/23	7.00	33.52	61916	13,208.78
	7.40	33.56	61917	
	8.20	33.50	61918	
	9.00	33.54	61919	
	9.40	33.50	61920	
	10.20	33.54	61921	
	11.00	33.54	61922	
	11.40	33.52	61923	
	12.20	33.48	61924	
	13.00	33.54	61925	
	12.00	32.50	66241	
	14.45	38.52	66242	
	7.15	12.54	9621	
	8.40	12.28	9621	
	10.06	12.48	9621	
	11.20	12.56	9621	
	12.40	12.16	9621	
2/2/23	7.00	33.56	61926	
	7.40	33.50	61927	
	8.20	33.54	61928	
	9.00	33.60	61929	
	9.40	33.54	61930	
	10.20	33.58	61931	
	11.00	33.52	61932	
	11.40	33.50	61933	
	7.30	5.86	66243	
	7.00	17.28	66244	
	8.25	39.00	66245	
	9.00	11.20	66246	
	9.00	20.30	66247	
	9.35	39.50	66248	
	10.00	19.20	66249	
	10.30	6.72	66250	
	12.10	39.42	66124	
	12.30	24.00	66125	
	14.50	37.80	66126	
	16.15	32.62	66127	
	7.00	13.26	9622	
	8.25	12.75	9622	
	9.50	12.60	9622	
	9.55	12.70	9622	
	11.10	12.50	9622	
	11.15	12.40	9622	
	13.05	12.70	9622	
	13.10	12.55	9622	
	13.30	12.01	9622	
3/2/23	7.00	33.54	61934	
	7.40	33.54	63454	
	8.20	33.50	63455	
	9.00	33.52	63456	
	9.40	33.64	63457	
	10.20	33.58	63458	
	11.00	33.52	63459	
	11.40	33.52	63460	
	12.20	33.50	63461	
	8.00	12.07	9702	
	9.06	12.03	9702	
	10.30	12.31	9702	
	11.20	11.43	9702	
	12.05	12.01	9702	
	10.04	8.88	9703	
	12.42	14.50	9704	
	7.30	2.84	61842	
	11.15	32.23	61843	
	12.15	32.62	61844	
	13.30	32.60	61845	
	14.45	32.62	61846	
	15.20	35.40	61847	
	15.45	32.35	61848	
6/2/23	8.00	5.00	61849	
	9.15	39.50	61850	
	10.34	6.48	9705	
	10.25	39.00	62501	
	10.30	6.70	62502	
	11.00	32.62	62503	
	11.40	39.40	62504	
	13.47	5.92	62505	
	15.50	32.47	62506	
	7.00	33.56	61951	
	7.40	33.56	61952	
	8.20	33.52	61953	
	9.00	33.56	61954	
	9.40	33.52	61955	
	10.20	33.50	61956	
	11.00	33.54	61957	
	10.40	12.50	61958	
	12.40	12.50	61959	
	13.20	25.00	61960	

Date	Time	Tonne	Docket Number	Total Tonnes
		March		
1/3/23	7.00	33.52	63333	14,625.88
	7.40	33.56	63334	
	8.20	33.52	63335	
	9.00	33.52	63336	
	9.40	33.50	63337	
	10.00	13.00	63338	
	11.30	13.00	63339	
	13.00	33.54	63340	
	13.40	33.64	63341	
	14.20	33.54	63342	
	15.10	33.52	63343	
	7.30	11.50	62818	
	8.40	32.34	62819	
	9.50	32.12	62820	
	11.08	32.28	62821	
	11.30	31.66	62822	
	12.25	36.88	62823	
	13.35	31.70	62824	
	13.45	30.92	62825	
	13.01	9.36	9694	
2/3/23	7.00	33.50	63344	
	7.40	33.48	63345	
	8.20	33.54	63346	
	9.10	33.58	63347	
	10.00	33.50	63348	
	10.40	13.00	63349	
	12.30	12.00	63350	
	7.15	32.48	62826	
	7.30	4.00	62827	
	8.40	7.00	62828	
	10.30	12.24	62829	
	11.00	32.42	62830	
	11.35	12.50	62831	
	11.45	11.82	62832	
	4.55	37.98	62833	
	7.33	9.60	9695	
	13.17	9.12	9696	
	13.50	33.56	62551	
	14.30	33.54	62552	
	15.10	33.52	62553	
	16.00	33.56	62554	
3/3/23	7.00	12.38	62834	
	8.00	31.50	62835	
	7.00	33.64	62555	
	7.40	33.58	62556	
	8.20	33.58	62557	
	9.00	33.60	62558	
	9.40	33.50	62559	
	10.00	13.00	62560	
	12.00	33.50	62562	
	12.40	33.56	62563	
	13.20	33.50	62564	
	14.00	33.54	62565	
	14.40	33.60	62566	
	8.10	12.08	62347	
	10.15	11.70	62348	
	15.30	32.38	62349	
	10.25	3.28	62350	
	10.35	38.40	62891	
	11.20	12.06	62892	
	12.00	39.00	62894	
	13.05	12.12	62895	
	13.43	3.90	62896	
	17.00	39.44	62897	
	10.22	5.60	9599	
6/3/23	7.15	32.48	62898	
	8.30	32.16	62899	
	13.10	32.62	62900	
	13.40	32.42	61727	
	15.43	36.38	61728	
	7.00	33.52	62601	
	7.40	33.56	62602	
	8.30	33.56	62603	
	9.10	33.60	62604	
	9.50	33.60	62605	
	10.20	33.54	62606	
	11.00	33.52	62607	
	11.40	33.56	62608	
	12.00	2.88	9600	
7/3/23	7.00	32.42	61729	
	7.10	17.48	61730	
	7.25	12.72	61731	
	7.00	9.60	61732	
	8.20	32.50	61733	
	8.30	12.58	61734	
	8.15	9.60	61735	
	10.00	9.50	61736	
	10.05	11.15	61737	

Date	Time	Tonne	Docket Number	Total Tonnes
		April		
1/4/23	7.20	31.70	62761	10,179.14
	9.00	31.50	62762	
	10.45	31.50	62763	
	12.00	38.60	62764	
	12.50	31.70	62765	
3/4/23	8.40	38.30	62766	
	7.00	33.54	62159	
	7.40	33.58	62160	
	8.20	33.52	62161	
	9.00	33.54	62162	
	9.40	33.56	62163	
	10.20	33.56	62164	
	11.00	33.50	62165	
	11.40	33.52	62166	
	7.10	8.00	63438	
	7.40	2.50	63439	
	10.00	28.26	63440	
	10.05	2.49	63441	
	10.40	9.00	63442	
	13.30	32.50	63443	
	14.30	33.40	63444	
	9.58	14.50	9632	
4/4/23	11.25	17.52	62767	
	12.30	34.60	62768	
	7.00	33.64	62167	
	7.50	33.54	62168	
	8.30	33.54	62169	
	9.00	33.58	62170	
	9.40	33.50	62171	
	10.20	33.56	62172	
	11.00	33.54	62173	
	11.40	33.52	62174	
	12.20	33.54	62175	
	13.00	33.54	62176	
	9.10	2.31	63445	
	9.20	32.00	63446	
	9.20	23.34	63447	
	9.48	7.20	63448	
	12.28	22.00	63449	
	16.30	37.00	63450	
5/4/23	7.15	32.46	62769	
	7.30	32.50	62770	
	13.20	32.40	62771	
	15.10	21.02	62772	
	15.30	32.60	62773	
	16.30	39.42	62774	
	7.00	33.56	62177	
	7.10	33.54	62178	
	7.40	33.50	62179	
	7.50	33.54	62180	
	8.20	33.52	62181	
	8.30	33.60	62182	
	9.00	33.56	62183	
	9.10	33.50	62184	
	9.40	33.48	62185	
	10.20	33.50	62186	
	7.25	11.50	9633	
	10.17	8.00	9634	
	14.57	11.00	9635	
6/4/23	8.00	7.20	62775	
	8.30	32.44	62776	
	9.00	37.38	62777	
	7.00	33.52	62187	
	7.10	33.50	62188	
	7.40	33.50	62189	
	7.50	33.50	62190	
	8.20	33.58	62191	
	8.30	33.56	62192	
	9.00	33.56	62193	
	9.10	33.60	62194	
	9.40	33.52	62195	
	9.50	33.50	62196	
	7.15	3.84	9636	
	9.30	6.00	62701	
	9.35	32.62	62702	
	10.15	39.00	62703	
	12.00	38.70	62704	
	12.00	7.20	62705	
	14.45	32.32	62706	
11/4/23	8.00	3.44	62707	
	9.00	18.00	62708	
	12.00	32.42	62709	
	12.00	13.20	62710	
	12.40	4.00	62711	
	14.00	33.24	62712	
	14.30	36.64	62713	
	7.00	33.56	62651	
	7.40	33.52	62652	

Date	Time	Tonne	Docket Number	Total Tonnes
		May		
1/5/23	7.20	12.00	62479	17,191.32
	7.50	20.10	62480	
	9.20	12.50	62481	
	10.30	7.20	62482	
	11.10	11.50	62483	
	11.15	32.74	62484	
	12.15	32.10	62485	
	14.00	32.32	62486	
	7.00	33.52	66552	
	7.40	33.52	66553	
	8.20	33.56	66554	
	9.00	33.54	66555	
	9.40	33.62	66556	
	10.20	33.54	66557	
	13.40	33.50	66558	
	14.20	33.52	66559	
	15.00	33.50	66560	
	15.30	33.56	66561	
	16.10	33.50	66562	
	16.50	33.50	66563	
	8.30	7.05	10029	
2/5/23	7.00	33.54	66564	
	7.10	33.50	66565	
	7.40	33.52	66566	
	7.50	33.56	66567	
	8.20	33.58	66568	
	8.30	33.46	66569	
	9.00	33.52	66570	
	9.40	33.54	66571	
	10.20	33.50	66572	
	11.00	33.54	66573	
	13.30	33.50	66574	
	14.10	33.56	66575	
	15.00	33.52	66576	
	7.30	30.40	62487	
	8.30	7.20	62488	
	9.33	3.10	62489	
	9.40	30.62	62490	
	11.00	3.80	62491	
	11.40	30.00	62492	
	13.15	32.28	62493	
	15.24	17.84	62494	
	16.00	38.12	62495	
	7.37	9.60	10030	
	9.41	1.00	10031	
	10.56	13.00	10032	
3/5/23	7.00	6.72	62496	
	9.00	6.72	62497	
	10.50	38.56	62498	
	11.00	17.28	62499	
	12.45	19.20	62500	
	7.00	33.62	66577	
	7.10	33.54	66578	
	7.40	33.54	66579	
	7.50	33.58	66580	
	8.20	33.50	66581	
	9.00	33.60	66582	
	14.00	33.54	66583	
	14.40	33.52	66584	
	15.31	37.06	63065	
	15.45	32.06	63066	
	16.10	39.10	63067	
	7.00	17.28	63068	
	16.35	35.52	63069	
4/5/23	7.00	33.58	66585	
	7.10	33.52	66586	
	7.40	33.52	66587	
	7.50	33.58	66588	
	8.10	33.60	66589	
	8.50	33.62	66590	
	9.30	33.68	66591	
	10.00	33.60	66592	
	10.40	33.68	66593	
	8.35	37.41	63070	
	11.20	31.40	63071	
	13.00	31.90	63072	
	13.15	33.12	63073	
	14.25	31.82	63074	
	15.30	32.54	63075	
	15.30	32.00	63076	
	16.00	31.90	63077	
	16.30	39.41	63078	
5/5/23	7.00	33.60	66594	
	7.30	33.65	66595	
	8.15	33.58	66596	
	8.45	33.70	63291	
	9.15	33.58	63292	
	9.50	33.65	63293	

Date	Time	Tonne	Docket Number	Total Tonnes
		June		
1/6/23	7.00	33.54	66933	14,870.49
	7.40	33.54	66934	
	8.20	33.58	66935	
	9.00	33.52	66936	
	9.40	33.46	66937	
	8.00	34.00	66880	
	7.40	9.00	66985	
	8.20	39.28	66986	
	7.15	17.28	66748	
	8.35	2.50	10044	
	14.47	1.72	10105	
	10.20	33.50	61651	
	11.00	33.56	61652	
	11.40	33.50	61653	
	12.20	33.52	61654	
	13.00	33.54	61655	
	13.30	13.00	61656	
	10.00	17.28	61626	
	11.45	33.26	61627	
	12.30	11.00	61628	
	13.45	33.25	61629	
	15.00	34.00	61630	
	9.40	32.70	62001	
	10.30	33.22	62002	
	13.38	40.00	62003	
	14.00	14.40	62004	
	15.30	32.70	62005	
	13.30	12.48	63151	
2/6/23	7.46	0.96	10106	
	8.14	1.29	10107	
	8.18	4.50	10108	
	10.49	9.60	10109	
	7.00	33.58	61657	
	7.40	33.56	61658	
	8.20	33.56	61659	
	9.00	33.52	61660	
	9.40	33.52	61661	
	10.20	33.60	61662	
	11.00	33.54	61663	
	11.40	33.50	61664	
	12.15	39.46	61665	
	11.30	34.00	61631	
	11.40	9.50	61632	
	7.10	40.70	62006	
	8.00	33.90	62007	
	11.20	12.20	62008	
	11.20	20.10	62009	
	7.10	4.80	63152	
	11.10	4.80	63153	
	13.30	12.16	66763	
	14.30	33.98	66764	
	14.50	11.94	66765	
	16.20	39.28	66766	
	16.00	12.20	66767	
	14.15	12.50	10045	
	14.58	0.43	10046	
3/6/23	9.20	39.18	66768	
	12.00	39.26	66769	
5/6/23	8.45	33.05	66770	
	8.55	12.50	66771	
	10.00	33.17	66772	
	10.05	32.50	66773	
	10.20	12.40	66774	
	11.15	33.16	66775	
	11.35	32.50	66776	
	11.50	32.50	66777	
	11.55	12.52	66778	
	13.20	32.50	66779	
	13.30	12.04	66780	
	13.45	33.12	66781	
	13.45	18.38	66782	
	14.45	32.50	66783	
	14.45	12.64	66784	
	15.50	36.68	66785	
	16.20	12.52	66786	
	7.20	12.84	66749	
	7.00	33.52	66938	
	7.40	33.56	66939	
	8.20	33.60	66940	
	9.00	33.54	66941	
	9.40	33.58	66942	
	10.20	33.52	66943	
	11.00	33.52	66944	
	11.40	33.50	66945	
	12.20	33.54	66946	
	7.30	22.80	66881	
	9.00	22.80	66882	
	7.30	12.58	10088	

Annual Tonnes

January	9789.17
February	13208.78
March	14625.88
April	10179.14
May	17191.32
June	14870.49
	79864.78

	7.00	17.28	65496
	9.15	32.55	65497
	9.55	33.65	65498
	10.00	21.12	65499
	11.00	37.46	66115
	12.10	33.00	66116
	12.50	32.00	66117
	12.55	18.32	66118
	14.00	32.16	66119
	14.15	18.40	66120
	15.00	39.60	66121
	15.10	32.40	66122
	16.25	38.96	66123
	7.00	33.52	66217
	7.40	33.56	66218
	8.20	33.50	66219
	9.00	33.54	66220
	9.40	33.54	66221
	10.20	33.50	66222
	11.00	33.58	66223
	11.40	33.48	66224
	12.20	33.54	66225
	13.00	33.58	66226
	13.40	33.54	66227
13/1/23	7.35	14.16	9615
	9.25	43.00	9701
	7.00	33.54	66228
	7.40	33.50	66229
	8.20	33.50	66230
	9.00	33.56	66231
	9.40	33.52	66232
	10.20	33.52	66233
	11.00	33.54	66234
	11.40	33.56	66235
	12.20	33.52	66236
	13.00	33.50	66237
	13.40	33.50	66238
	8.30	21.60	62401
	9.50	9.00	62402
	11.00	19.20	62403
	13.10	9.00	62404
	13.00	19.20	62405
	15.40	31.60	62406
	9.00	4.20	63451
	11.43	22.00	9662
	12.10	0.96	9663
14/1/23	11.30	9.00	62407
16/1/23	7.30	11.96	62408
	7.00	17.28	62409
	8.35	39.22	62410
	9.01	11.64	62411
	9.30	33.00	62412
	10.30	32.00	62413
	10.40	33.20	62414
	10.15	19.20	62415
	12.00	33.00	62416
	12.30	19.20	62417
	14.45	32.22	62418
	15.00	32.38	62419
	16.10	32.63	62420
	16.35	38.66	62421
	7.00	33.60	61801
	7.40	33.56	61802
	8.20	33.54	61803
	9.00	33.50	61804
	9.40	33.52	61805
	11.30	33.54	61806
	12.20	33.56	61807
	7.56	12.00	9664
	8.31	34.56	9665
	8.35	12.00	9666
	9.09	14.50	9667
	14.30	4.80	9668
	14.12	17.28	9669
17/1/23	7.10	11.86	62422
	7.00	17.28	62423
	9.30	19.20	62425
	11.00	32.00	62426
	11.00	32.08	62427
	11.28	38.29	62428
	12.25	3.22	62429
	13.00	32.00	62430
	13.15	32.18	62431
	12.30	19.20	62432
	16.00	33.25	62433
	7.00	33.58	61808
	7.40	33.50	61809
	8.20	33.54	61810
	9.00	33.50	61811
	9.40	33.50	61812
	10.20	33.58	61813

7/2/23	11.16	1.50	9706
	14.43	60.00	9708
	7.00	17.28	62507
	8.15	32.16	62508
	8.50	32.66	62509
	9.35	12.08	62510
	10.00	32.50	62511
	10.00	32.42	62512
	10.30	17.28	62513
	11.50	32.76	62514
	12.20	31.60	62515
	12.50	36.10	62516
	14.15	33.28	62517
	15.30	32.62	62518
	16.00	31.56	62519
	16.50	39.62	62520
	7.00	33.52	61961
	7.40	33.60	61962
	8.20	33.50	61963
	9.00	33.54	61964
	9.40	33.52	61965
	10.20	33.50	61966
	11.00	33.56	61967
	11.40	33.56	61968
	12.20	33.52	61969
8/2/23	7.58	2.84	9710
	8.35	2.12	9710
	9.15	2.50	9710
	10.01	2.50	9710
	15.45	9.00	9711
	16.05	8.00	9712
	7.40	9.60	62521
	7.00	17.28	62522
	10.00	32.67	62523
	11.00	3.00	62524
	11.00	17.28	62525
	13.55	33.32	62527
	14.26	17.76	62528
	7.00	33.52	61970
	7.40	33.58	61971
	8.20	33.58	61972
	9.00	33.54	61973
	9.40	33.52	61974
	10.20	33.52	61975
	11.00	33.54	61976
	11.40	33.56	61977
	12.20	33.52	61978
	13.00	33.54	61979
9/2/23	14.58	2.50	9714
	15.44	7.60	9715
	7.30	6.72	62529
	8.50	32.48	62531
	9.18	31.61	62532
	9.30	30.82	62533
	10.30	33.10	62534
	11.30	31.99	62535
	11.54	31.44	62536
	12.00	32.10	62537
	12.20	11.00	62538
	12.20	25.30	62539
	12.40	37.30	62540
	13.50	31.93	62541
	13.58	32.46	62542
	14.00	32.42	62543
	15.15	32.48	62544
	15.30	32.12	62545
	7.00	33.52	61980
	7.40	33.56	61981
	8.20	33.54	61982
	9.00	33.50	61983
	9.40	33.58	61984
	9.45	13.00	61985
	13.40	33.50	61986
	14.20	33.54	61987
	15.10	33.50	61988
10/2/23	7.00	32.45	62546
	7.19	31.48	62547
	7.30	12.00	62548
	8.50	32.23	62549
	9.15	31.50	62550
	7.00	33.46	61989
	7.40	33.56	61990
	8.20	33.52	61991
	9.00	33.64	61992
	7.58	12.80	63462
	9.40	33.50	61935
	10.20	33.54	61936
	11.00	33.52	61937
	12.05	37.34	61938
	13.30	32.30	61939
	13.35	11.98	61940

	10.25	12.48	61738
	10.00	9.60	61739
	11.15	32.28	61740
	11.00	9.60	61741
	11.00	12.42	61742
	12.00	2.73	61743
	13.15	33.32	61744
	13.20	12.58	61745
	13.00	10.80	61746
	14.28	9.60	61747
	14.30	33.22	61748
	15.00	32.52	61749
	15.56	32.62	61750
	7.00	33.50	62609
	7.40	33.58	62610
	8.20	33.52	62611
	9.00	33.50	62612
	9.40	33.56	62613
	10.20	33.56	62614
	11.00	33.52	62615
	11.40	33.54	62616
	13.13	9.36	10001
	16.55	33.00	10002
	16.57	8.00	10003
	16.00	37.36	62836
8/3/23	14.30	32.00	63351
	14.55	12.12	63352
	14.56	11.76	63353
	16.10	32.62	63354
	7.00	2.40	62837
	7.27	5.12	62838
	7.40	13.00	62839
	8.40	12.54	62840
	9.20	38.00	62841
	9.30	10.34	62842
	10.15	12.60	62843
	11.20	12.54	62844
	11.30	11.64	62845
	12.30	39.00	62846
	13.05	32.00	62847
	13.15	32.56	62848
	13.19	11.84	62849
	13.25	12.00	62850
	7.00	33.56	62617
	7.40	33.56	62618
	8.20	33.50	62619
	9.00	33.58	62620
	9.30	13.00	62621
	11.00	12.00	62622
	13.40	33.50	62623
	14.20	33.62	62624
	15.00	33.54	62625
	15.40	33.54	62626
	16.20	33.52	62627
	7.14	13.00	10004
	7.05	21.00	10005
	10.51	13.50	10006
9/3/23	7.10	12.18	63355
	7.20	12.00	63356
	7.15	12.08	63357
	8.06	1.72	63358
	9.10	32.04	63359
	12.55	6.00	63360
	13.20	3.64	63361
	15.40	32.62	63362
	7.00	33.62	62628
	7.40	33.52	62629
	8.20	33.52	62630
	9.00	33.58	62631
	9.40	33.50	62632
	10.20	33.50	62633
	11.00	33.54	62634
	11.40	33.52	62635
	7.03	1.50	10007
	12.58	6.00	10008
10/3/23	7.00	33.54	62636
	7.40	33.52	62637
	7.10	32.32	63363
	7.50	12.24	63364
	8.30	32.42	63365
	8.45	38.70	63366
	9.30	1.29	63367
	10.15	13.00	63368
	11.20	12.36	63369
	11.44	9.60	10009
	8.20	33.54	63401
	9.00	33.56	63402
	9.40	33.64	63403
	10.20	33.50	63404
	11.00	33.52	63405
	11.40	33.54	63406

	8.20	33.52	62653
	9.00	33.58	62654
	9.40	33.60	62655
	10.20	33.50	62656
	11.00	33.54	62657
	10.03	24.00	10022
12/4/23	7.00	6.72	62714
	8.15	31.40	62715
	9.00	6.72	62716
	10.30	6.72	62717
	11.30	39.00	62718
	12.00	38.40	62719
	12.30	6.72	62720
	13.15	6.12	62721
	13.30	39.40	62722
	14.00	6.72	62723
	14.55	39.00	62724
	7.00	33.48	62658
	7.40	33.62	62659
	8.20	33.50	62660
	9.00	33.50	62661
	9.40	33.54	62662
	9.50	33.52	62663
	10.20	33.56	62664
	11.45	33.56	62665
	13.20	33.50	62666
	14.00	33.52	62667
	14.10	33.52	62668
	8.57	38.00	10023
	11.51	4.50	10024
	13.31	6.00	10025
13/4/23	9.15	2.38	62725
	9.40	7.40	62726
	10.30	13.46	62727
	10.35	17.90	62728
	10.50	32.50	62729
	12.14	39.00	62730
	12.30	11.96	62731
	13.30	12.20	62732
	14.45	11.90	62733
	7.00	33.54	62669
	7.40	33.58	62670
	8.20	33.54	62671
	9.00	33.50	62672
	9.40	33.50	62673
	10.20	33.54	62674
	11.00	33.58	62675
	11.10	33.50	62676
	11.50	33.52	62677
	12.40	33.50	62678
	13.20	33.64	62679
	14.00	33.52	62680
	12.40	33.00	10026
	12.59	0.60	10027
	16.34	14.50	10028
14/4/23	7.00	33.58	62681
	7.10	33.56	62682
	10.00	32.18	62451
	11.30	32.22	62452
	13.00	32.37	62453
	7.40	33.56	62246
	7.50	33.50	62247
	8.20	33.54	62248
	8.30	33.56	62249
	9.00	33.50	62250
	7.00	32.64	62197
	8.15	7.68	62198
	8.30	32.27	62199
	9.40	31.50	62200
	9.10	33.52	63251
	9.40	33.52	63252
	9.50	33.60	63253
	10.00	33.50	63254
	10.10	33.50	63255
	15.00	38.38	63256
	15.10	12.30	63257
	16.25	38.06	63258
	12.15	10.00	9735
	13.23	1.50	9736
15/4/23	11.40	38.00	62975
17/4/23	7.45	38.40	62976
	8.20	38.50	62977
	9.30	32.12	62978
	12.00	6.48	62979
	13.30	3.00	62980
	13.45	33.22	62981
	15.05	12.00	62982
	7.00	33.52	62778
	7.40	33.58	62779
	8.20	33.54	62780
	9.00	33.54	62781

	10.20	33.68	63294
	11.00	33.70	63295
	8.48	8.40	10034
	10.51	4.00	10035
	8.30	33.00	10036
	9.15	33.00	10036
	10.00	33.00	10036
	10.40	17.00	10036
	11.25	14.50	10036
	11.10	4.20	9746
	15.05	4.80	9747
	13.50	39.55	66501
	7.25	34.45	66601
	8.40	31.82	66602
	9.00	33.00	66603
	10.30	13.50	66604
	15.00	33.02	66605
	15.10	31.90	66606
6/5/23	7.55	17.98	66607
8/5/23	7.10	32.00	66608
	7.20	31.72	66609
	7.00	17.28	66610
	8.40	4.00	66611
	9.30	33.00	66612
	9.48	31.90	66613
	10.30	19.20	66614
	10.40	31.80	66615
	10.48	31.55	66616
	12.10	32.50	66617
	13.00	0.48	66618
	12.30	19.20	66619
	13.30	31.76	66620
	14.15	32.30	66621
	15.00	34.00	66622
	15.00	31.22	66623
	7.00	33.52	66502
	7.40	33.58	66503
	8.20	33.50	66504
	9.00	33.54	66505
	9.40	33.56	66506
	10.20	33.58	66507
	10.10	33.50	66508
	13.30	33.62	66509
	14.10	33.54	66510
	14.50	33.52	66511
	16.20	38.72	63027
	11.37	2.88	9637
	11.49	11.00	9638
	13.32	3.60	9639
	9.01	29.00	9748
	9.15	11.40	9749
	10.00	11.36	9749
	9.42	14.40	9750
9/5/23	7.00	33.56	66512
	7.40	33.50	66513
	8.20	33.52	66514
	9.00	33.58	66515
	9.40	33.54	66516
	10.20	33.50	66517
	11.30	33.50	66518
	12.50	33.50	66519
	13.50	33.60	66520
	14.30	33.52	66521
	15.10	33.56	66522
	15.50	33.54	66523
	7.05	33.26	66624
	7.15	32.20	66625
	7.20	31.86	66626
	8.30	33.12	66627
	9.00	30.44	66628
	9.15	31.12	66630
	9.55	33.17	66631
	10.10	34.20	66632
	10.20	32.00	66634
	11.00	32.00	66635
	11.10	33.05	66636
	12.00	31.80	66637
	12.20	18.12	66638
	12.30	30.00	66639
	13.30	31.60	66640
	13.45	32.62	66641
	13.45	6.00	66642
10/5/23	10.40	9.00	66643
	13.45	32.47	66644
	14.00	12.50	66645
	14.00	20.00	66646
	7.00	33.52	66524
	7.40	33.54	66525
	8.20	33.58	66526
	9.00	33.50	66527
	9.40	33.54	66528

	8.30	12.22	10088
	9.50	12.30	10088
	11.00	12.34	10088
	12.00	21.80	10088
	12.07	12.36	10088
	13.00	12.56	10088
	13.30	22.80	10088
	13.55	12.28	10088
6/6/23	7.36	11.76	66787
	7.56	12.40	66788
	8.54	15.00	66789
	9.00	12.16	66790
	9.30	12.52	66791
	11.00	11.86	66792
	11.00	12.88	66793
	11.40	11.00	66794
	12.23	12.06	66795
	13.05	5.70	66796
	14.21	12.32	66797
	14.50	39.68	66798
	15.00	12.26	66799
	15.45	39.48	66800
	7.00	33.54	66947
	7.40	33.56	66948
	8.20	33.60	66949
	9.00	33.52	66950
	7.30	17.28	66882
	11.30	19.20	66883
	9.40	33.52	66987
	10.20	33.52	66988
	11.00	33.54	66989
	11.40	33.50	66990
	12.20	33.58	66991
	13.00	33.54	66992
	14.20	33.50	66993
	7.36	18.00	10047
	7.47	2.40	10048
	10.02	2.88	10049
	13.15	4.70	10050
	7.18	12.18	10089
	8.20	11.80	10089
	9.45	12.40	10089
	10.47	12.40	10089
	12.15	12.00	10089
	13.10	12.30	10089
7/6/23	7.00	33.56	66884
	7.40	33.58	66885
	8.20	33.52	66886
	9.00	33.50	66887
	9.40	33.48	66888
	10.20	33.52	66889
	11.00	33.54	66890
	11.40	33.50	66891
	12.20	33.50	66892
	13.00	33.52	66893
	7.10	33.17	66994
	7.20	40.85	66995
	8.30	33.22	66996
	8.35	11.66	66997
	9.15	39.40	66998
	10.10	37.04	66999
	11.45	33.02	67000
	12.00	33.34	61633
	13.30	31.00	61634
	13.45	33.66	61635
	14.00	11.70	61636
	15.30	39.54	61637
	9.08	10.50	66750
	12.45	18.00	61666
	12.39	0.50	10110
	13.27	1.92	10111
	14.09	15.00	10112
	15.40	1.92	10113
8/6/23	7.00	33.54	66894
	7.40	33.50	66895
	8.20	33.54	66896
	9.00	33.50	66897
	9.40	33.52	66898
	10.20	33.56	66899
	11.00	33.54	66900
	7.30	21.12	61667
	11.40	33.54	63201
	12.40	33.50	63202
	13.30	33.52	63203
	11.00	1.92	63156
	12.15	33.02	63157
	13.35	33.64	63158
	14.00	31.50	63159
	15.00	33.86	63160
	15.15	39.06	63161
	8.45	18.00	9647

	11.00	33.56	61814
	11.40	33.52	61815
	12.20	33.48	61816
	9.59	2.00	9670
	10.09	13.00	9671
	11.14	5.00	9673
	14.15	12.00	9674
	14.27	3.00	9675
18/1/23	7.00	7.20	62434
	8.45	32.42	62435
	9.30	7.20	62436
	11.15	39.00	62437
	11.55	39.50	62438
	13.20	32.00	62439
	13.45	9.00	62440
	14.15	32.30	62441
	15.00	37.86	62442
	15.30	32.52	62443
	17.00	38.76	62444
	7.00	33.56	61817
	7.40	33.56	61818
	8.20	33.50	61819
	9.00	33.54	61820
	9.40	33.52	61821
	10.20	33.56	61822
	11.00	33.50	61823
	11.40	33.52	61824
	8.12	11.00	9676
	8.57	7.00	9677
	10.30	7.00	9678
	10.35	31.86	9679
	11.00	18.00	9680
	13.07	30.10	9681
	15.09	31.00	9682
19/1/23	7.00	33.54	61825
	7.40	33.58	61826
	8.20	33.52	61827
	9.00	33.54	61828
	9.40	33.58	61829
	10.20	33.54	61830
	11.00	33.46	61831
	11.40	33.56	61832
	12.20	33.56	61833
	13.00	33.52	61834
	12.30	33.50	61835
	10.50	12.38	62445
	11.15	13.64	62447
	13.10	12.50	62448
	16.20	38.28	62449
	16.45	38.93	62450
	14.04	14.40	9683
20/1/23	7.00	33.50	61836
	7.40	33.56	61837
	8.20	33.54	61838
	9.00	33.52	61839
	9.40	33.50	61840
	10.20	33.60	61841
	7.00	17.28	63452
	8.45	32.25	63453
	12.24	22.00	9571
	9.30	31.42	62351
	9.00	14.40	62352
	10.00	32.47	62353
	11.00	12.62	62354
	11.10	32.28	62355
	11.15	32.72	62356
	11.30	5.00	62357
	11.00	33.56	61851
	11.40	33.54	61852
	12.20	33.50	61853
	12.00	33.50	61854
	13.15	31.83	61855
	13.25	12.38	61856
	14.50	32.38	61857
	14.50	32.68	61858
	15.45	32.46	61859
21/1/23	8.10	32.50	61860
	11.45	39.50	62358
23/1/23	7.30	11.52	62359
	8.35	39.20	62360
	9.00	32.14	62361
	9.15	32.80	62362
	10.45	32.10	62363
	12.45	31.98	62364
	14.30	31.50	62365
	14.50	32.58	62366
	7.00	33.70	61861
	7.30	33.60	61862
	8.10	33.65	61863
	8.40	33.60	61864
	9.15	33.70	61865

	14.00	32.67	61941
	14.00	32.37	61942
	14.16	31.52	61943
	15.30	32.66	61944
	14.26	38.18	61945
	15.30	31.78	61946
	9.30	11.18	61892
	10.00	37.39	61893
	10.15	37.96	61894
	10.30	38.40	61895
	11.00	10.56	61896
	11.10	31.93	61897
	11.20	10.62	61898
	11.45	31.85	61899
	12.00	32.72	61900
	13.02	10.28	9623
11/2/23	9.00	32.00	61947
13/2/23	7.00	11.90	61948
	7.00	31.74	61949
	8.00	5.00	61950
	7.32	31.84	66128
	7.35	32.55	66129
	8.00	12.28	66130
	9.00	11.60	66131
	9.05	32.08	66132
	9.43	31.50	66133
	9.45	33.46	66134
	10.30	11.50	66135
	10.40	33.02	66136
	10.58	34.44	66137
	11.00	31.64	66138
	11.30	32.95	66139
	12.00	32.82	66140
	12.09	31.57	66141
	12.00	11.36	66142
	12.10	32.00	66143
	12.45	31.78	66144
	13.30	34.00	66145
	14.00	11.36	66146
	14.05	31.66	66147
	14.15	31.28	66148
	7.00	33.48	63463
	7.10	33.56	63464
	7.50	33.56	63465
	7.40	33.58	63466
	8.20	33.54	63467
	8.30	33.50	63468
	8.50	32.00	63469
	9.00	33.50	63470
	10.10	32.00	63471
	10.20	33.50	63472
	11.30	32.00	63473
	11.40	33.50	63474
	12.50	32.00	63475
	7.36	2.50	9624
	10.36	1.00	9684
	13.03	33.50	9685
	13.37	3.00	9686
14/2/23	7.15	32.32	66149
	7.00	13.28	66150
	7.00	33.62	63476
	7.40	33.54	63477
	8.20	33.56	63478
	9.00	33.50	63479
	9.40	33.54	63480
	10.20	33.50	63481
	11.00	33.50	63482
	13.20	33.52	63483
	7.40	34.72	62251
	7.45	34.58	62252
	9.00	31.42	62254
	9.00	11.74	62255
	9.30	34.30	62256
	10.20	38.70	62257
	10.40	32.26	62258
	11.00	11.40	62259
	11.30	33.70	62260
	13.00	31.16	62261
	13.30	11.86	62262
	13.15	3.84	62263
	13.52	32.22	62264
	14.00	33.28	62265
	14.10	17.92	62266
	9.21	39.00	9687
15/2/23	7.00	33.58	63484
	7.50	33.50	63485
	8.30	33.54	63486
	9.10	33.52	63487
	9.50	33.60	63488
	10.30	33.52	63489
	11.00	33.52	63490

	12.20	33.54	63407
	14.00	9.00	9697
11/3/23	9.15	1.00	9699
13/3/23	10.32	43.70	9698
	9.19	12.00	9728
	12.00	12.00	9729
	13.05	34.60	62901
	13.30	1.72	62902
	14.10	32.30	62903
	7.30	38.50	62904
	9.10	38.18	62905
	9.20	39.00	62906
	9.30	32.50	62907
	7.00	10.80	62908
	7.40	3.50	62909
	9.00	32.02	62910
	10.15	32.32	62911
	10.30	4.00	62912
	10.55	5.98	62913
	11.45	32.37	62914
	13.40	38.92	62915
	13.45	32.50	62916
	15.00	39.20	62917
	15.10	32.36	62918
	15.25	38.46	62919
	7.30	33.62	62051
	8.20	33.50	62052
	9.00	33.54	62053
	9.40	33.58	62054
	10.20	33.54	62055
	11.00	33.50	62056
	11.40	33.50	62057
	12.20	33.56	62058
	15.00	33.54	62059
	13.40	33.52	62060
	14.20	33.56	62061
	15.00	33.50	62062
14/3/23	12.45	24.10	62920
	13.30	38.58	62921
	13.45	38.00	62922
	13.50	32.42	62923
	14.50	32.62	62924
	7.00	33.52	62063
	7.40	33.54	62064
	8.20	33.50	62065
	9.00	33.60	62066
	9.40	33.48	62067
	10.20	33.54	62068
	11.00	33.56	62069
	11.40	33.54	62070
	12.20	33.50	62071
	13.00	33.52	62072
	13.40	33.52	62073
	14.20	33.50	62074
	15.00	33.54	62075
	10.18	6.86	10010
	11.20	1.00	10011
	14.42	3.60	10012
15/3/23	7.00	22.46	62925
	7.00	33.56	62076
	7.40	33.50	62077
	8.20	33.52	62078
	9.00	33.52	62079
	9.40	33.58	62080
	10.10	33.58	62081
	10.50	33.52	62082
	11.00	33.56	62083
	11.40	33.50	62084
	12.20	33.50	62085
	13.00	33.54	62086
	8.51	5.40	10013
	13.02	20.00	10014
	7.00	32.28	62926
	7.40	22.80	62927
	8.00	25.08	62928
	8.15	3.32	62929
	8.20	26.02	62930
	9.50	16.90	62931
	10.36	25.78	62932
	10.45	22.96	62933
	10.50	28.06	62934
	12.10	9.80	62935
	12.25	10.05	62936
	12.45	11.12	62937
	13.10	32.00	62938
	13.30	38.00	62939
	13.40	3.00	62940
	13.45	10.35	62941
	13.50	9.90	62942
	14.10	22.76	62943
	14.25	11.86	62944

	9.40	33.56	62782
	10.20	33.58	62783
	11.00	33.52	62784
	11.40	33.52	62785
	11.45	37.80	62145
	15.20	38.96	62146
	8.41	2.00	9737
	13.17	2.00	9738
	14.01	32.00	9739
	14.25	26.00	9739
	14.55	14.50	9739
18/4/23	7.00	33.56	62786
	7.40	33.64	62787
	8.20	33.60	62788
	9.00	33.52	62789
	9.40	33.54	62790
	10.20	33.50	62791
	11.00	33.58	62792
	11.40	33.50	62793
	12.20	33.56	62794
	7.30	17.20	62983
	9.30	18.00	62984
	9.50	39.70	62985
	11.04	37.24	62986
	11.15	18.50	62987
	11.50	39.00	62988
	12.25	30.29	62989
	13.15	17.50	62990
	14.15	12.04	62991
	15.20	32.42	62992
	15.40	37.76	62993
	15.30	30.63	62147
19/4/23	7.00	33.52	62795
	7.40	33.56	62796
	8.30	33.58	62797
	9.00	33.50	62798
	9.40	33.54	62799
	10.20	33.54	62800
	7.15	17.70	62994
	7.30	33.80	62995
	7.40	16.20	62996
	9.15	17.50	62997
	9.30	17.50	62998
	10.50	32.00	62999
	11.00	16.50	63000
	11.06	37.52	62148
	11.10	17.30	62149
	13.05	17.20	62150
	13.10	17.00	63259
	13.05	32.00	63260
	13.50	9.00	63261
	14.30	32.32	63262
	14.55	31.96	63263
	14.45	32.30	63264
	14.46	5.96	63265
	15.00	38.40	63266
	15.07	17.74	63267
	16.00	32.42	63268
	11.00	33.56	62734
	11.40	33.50	62735
	12.20	33.60	62736
	13.00	33.52	62737
	7.25	10.70	9740
	10.28	26.00	9741
	10.31	9.00	9742
	11.13	12.00	9743
20/4/23	7.00	33.58	62738
	7.40	33.52	62739
	8.20	33.52	62740
	9.00	33.56	62741
	9.40	33.50	62742
	10.20	33.54	62743
	13.30	33.52	62744
	14.10	33.50	62745
	14.50	33.50	62746
	7.30	32.50	63269
	7.50	32.47	63270
	8.00	7.20	63271
	9.10	33.02	63272
	9.30	6.72	63273
	10.30	10.80	63274
	11.00	6.72	63275
	12.15	6.72	63276
	13.08	18.40	63277
	14.48	33.22	63278
	16.00	32.40	63279
	16.05	29.61	63280
	13.47	6.00	9744
21/4/23	7.00	33.56	62747
	7.30	33.16	63281
	7.35	6.72	63282

	10.20	33.50	66529
	11.00	33.54	66530
	11.40	33.58	66531
	12.20	33.60	66532
	13.00	33.52	66533
	13.30	33.54	66534
	14.10	33.56	66535
	14.50	33.52	66536
11/5/23	7.10	32.60	66647
	8.50	34.00	66648
	12.00	33.00	66649
	7.50	33.52	66537
	8.30	33.56	66538
	9.10	33.50	66539
	9.40	33.52	66540
	10.20	33.50	66541
	11.00	33.58	66542
	11.40	33.56	66543
	12.20	33.54	66544
	13.00	33.50	66545
	13.40	33.50	66546
	14.20	33.50	66547
	15.00	33.52	66548
	7.00	7.20	63028
	8.30	4.80	63029
	12.18	37.06	63030
	13.45	6.02	63031
12/5/23	7.00	33.50	66549
	7.10	33.56	66550
	7.50	9.00	63079
	8.00	32.50	63081
	9.20	32.68	63082
	8.50	31.56	63083
	8.00	16.08	63084
	9.15	33.55	63085
	9.30	8.50	63086
	10.45	32.58	63087
	10.40	34.00	63088
	11.10	35.90	63089
	12.00	8.40	63090
	13.20	32.88	63091
	14.30	31.90	63092
	14.35	33.08	63093
	7.40	33.56	61501
	7.50	33.60	61502
	8.20	33.52	61503
	8.30	33.56	61504
	9.10	33.48	61505
	10.00	33.52	61506
	11.40	33.50	61507
	13.30	33.50	61508
13/5/23	10.08	28.88	10086
15/5/23	7.35	31.55	66597
	7.45	10.08	66598
	9.40	34.04	66599
	10.00	12.50	66600
	7.30	32.00	63296
	10.25	12.20	63297
	11.00	32.00	63298
	10.55	32.42	63299
	11.05	2.88	63300
	11.00	37.40	63032
	11.25	37.89	63033
	11.30	12.30	63034
	12.00	12.20	63035
	12.40	32.50	63036
	13.05	32.45	63037
	13.30	12.00	63038
	13.30	12.48	63039
	14.30	32.67	63040
	14.55	37.20	63041
	15.06	3.36	63042
	16.10	32.74	63043
	7.00	33.52	61551
	7.40	33.58	61552
	8.20	33.46	61553
	9.00	33.56	61554
	9.40	33.50	61555
	10.20	33.50	61556
	11.45	33.50	61557
	13.00	33.50	61558
	14.30	33.54	61559
	15.10	33.50	61560
	15.50	33.52	61561
	16.00	33.52	61562
	12.18	5.00	10037
16/5/23	7.30	7.20	63044
	7.30	17.28	63045
	8.30	12.54	63046
	8.40	12.00	63047
	8.45	12.30	63048

	10.56	11.52	9648
9/6/23	8.45	33.12	63162
	9.35	32.20	63163
	10.00	33.22	63164
	11.15	33.17	63165
	13.00	32.20	63166
	14.25	32.20	63167
	7.00	33.50	67001
	7.40	33.54	67002
	8.20	33.54	67003
	9.00	33.52	67004
	9.40	33.56	67005
	10.20	33.50	67006
	11.00	33.52	67007
	11.40	33.58	67008
	12.10	32.55	67051
	13.10	33.18	67052
	14.15	33.00	67053
	15.45	39.08	62010
13/6/23	8.20	16.00	62011
	10.15	16.50	62012
	14.30	39.64	62013
	15.45	38.36	62014
	11.00	12.18	61638
	11.20	32.85	61639
	11.45	12.02	61640
	12.40	31.75	61641
	12.30	12.14	61642
	12.50	12.62	61643
	14.35	12.66	61644
	14.38	12.36	61645
	15.00	5.28	61646
	15.50	12.12	61647
	16.00	12.52	61648
	7.00	33.52	63204
	7.40	33.56	63205
	8.20	33.52	63206
	9.00	33.60	63207
	9.40	33.56	63208
	10.20	33.54	63209
	11.00	33.50	63210
	11.40	33.50	63211
	12.08	8.00	9851
	8.49	8.50	9852
	9.40	9.00	9853
	13.43	15.20	9854
14/6/23	7.18	12.42	62015
	8.00	6.00	62016
	8.25	12.10	62017
	8.26	12.22	62018
	8.30	17.50	62019
	8.45	3.00	62020
	9.30	12.32	62021
	9.30	12.04	62022
	10.25	9.00	62023
	10.30	17.50	62024
	11.00	12.20	62025
	11.00	12.02	62026
	12.00	32.32	62027
	12.15	12.30	62028
	12.10	12.14	62029
	12.30	17.20	62030
	12.30	20.00	62031
	13.30	31.60	62032
	13.50	12.14	62033
	13.55	12.38	62034
	14.20	17.50	62035
	15.00	31.76	62036
	15.15	11.90	62037
	15.50	37.88	62038
	7.15	12.12	61649
	7.00	17.28	61650
	7.00	33.50	61212
	7.40	33.58	63213
	8.20	33.56	63214
	9.00	33.52	63215
	9.40	33.52	63216
	10.20	33.50	63217
	11.00	33.56	63218
	11.40	33.54	63219
	12.20	33.52	63220
	13.00	33.50	63221
	11.31	7.30	9855
	12.18	2.40	9856
15/6/23	7.15	33.22	62039
	7.15	13.10	62040
	7.15	13.20	62041
	8.25	12.02	62042
	8.30	12.46	62043
	8.40	33.17	62044
	9.30	12.10	62045

	9.50	33.75	61866
	10.25	33.60	61867
	11.40	33.60	61868
	12.15	33.60	61869
	12.50	33.80	61870
	7.38	12.45	9616
24/1/23	7.00	17.28	62367
	7.45	9.60	62368
	9.40	32.56	62369
	10.00	9.60	62370
	10.00	19.20	62371
	11.25	32.90	62372
	11.55	17.50	62373
	12.00	9.60	62374
	12.00	17.28	62375
	16.00	32.72	62376
	16.00	5.76	62377
	15.00	7.20	62378
	7.00	33.70	61871
	7.25	33.80	61872
	8.00	33.60	61873
	8.30	33.70	61874
	9.10	33.60	61875
	9.45	33.60	61876
	10.15	33.70	61877
	10.55	33.50	61878
	11.30	33.50	61879
	7.50	12.50	9616
	10.10	12.20	9617
	10.13	11.80	9617
	10.50	12.00	9617
	11.10	11.80	9617
	11.17	11.80	9617
	13.45	12.00	9617
	8.54	12.10	9617
	7.00	12.40	9617
	7.10	12.60	9617
	7.24	12.20	9617
	8.30	12.40	9617
	8.50	12.00	9617
	7.18	7.50	9618
	7.21	7.74	9618
	9.08	7.50	9618
	9.24	7.30	9618
	10.37	8.00	9618
	10.41	7.76	9618
	12.00	7.80	9618
	12.32	8.80	9618
	13.52	8.00	9618
25/1/23	7.05	33.80	61880
	7.20	33.60	61881
	7.50	33.70	61882
	8.20	33.60	61883
	9.00	33.80	61884
	9.30	33.70	61885
	10.00	33.80	61886
	10.35	33.60	61887
	11.15	33.70	61888
	11.50	33.80	61889
	12.25	33.80	61890
	14.00	33.50	61891
	7.00	12.36	62379
	7.15	32.82	62380
	7.30	12.30	62381
	7.00	24.00	62382
	8.35	32.08	62383
	9.20	11.45	62384
	9.00	5.76	62385
	10.00	32.52	62386
	11.15	32.20	62387
	11.00	19.20	62388
	12.45	31.82	62389
	13.00	12.00	62390
	13.00	20.00	62391
	13.15	32.36	62392
	13.30	37.92	62393
	14.40	32.62	62394
	15.00	17.28	62395
	16.00	32.64	62396
	16.30	4.32	62397
30/1/23	7.00	31.56	62398
	12.00	32.42	62399
	13.45	32.14	62400
	7.00	33.56	61901
	7.40	33.50	61902
	8.20	33.58	61903
	9.00	33.54	61904
	9.40	33.52	61905
	10.20	33.54	61906
	11.00	33.52	61907
	14.50	32.23	66239

	11.40	33.56	63491
	12.20	33.50	63492
	13.00	33.54	63493
	13.40	33.58	63494
	7.05	38.08	62267
	7.00	10.44	62268
	7.15	30.94	62269
	7.30	32.78	62270
	7.50	5.58	62271
	8.15	11.00	62272
	8.30	7.20	62273
	8.50	31.96	62274
	9.00	11.54	62275
	9.22	32.84	62276
	9.30	32.74	62277
	10.30	31.26	62278
	10.45	13.00	62279
	11.45	31.48	62280
	12.50	30.32	62281
	14.00	34.14	62282
	14.30	30.92	62283
	16.00	32.52	62284
	16.20	38.18	62285
	8.40	1.00	9688
	8.45	13.50	9689
	11.59	3.00	9690
	14.44	15.00	9691
16/2/23	7.00	33.54	63495
	7.40	33.50	63496
	8.20	33.52	63497
	9.00	33.54	63498
	9.40	33.56	63499
	10.20	33.54	63500
	7.00	10.25	62286
	7.15	31.30	62287
	7.30	33.14	62288
	8.55	11.00	62289
	9.15	5.76	62290
	10.45	32.42	62291
	11.55	39.38	62292
	9.00	18.00	62801
	10.00	22.00	62802
	9.42	3.00	9692
	14.02	2.50	9693
	9.25	30.98	61701
	7.15	32.42	61703
	7.27	31.48	61704
	11.40	32.76	61705
	13.50	31.50	61706
	11.00	33.58	61707
	11.40	33.64	61708
	12.20	33.52	61709
	13.00	33.48	61710
17/2/23	7.00	33.50	61711
	7.40	33.52	61712
	8.20	33.62	61713
	9.00	33.54	61714
	9.40	33.50	61715
	9.40	32.00	61716
	11.30	33.50	61717
	13.45	33.58	61718
	14.20	33.50	61719
	15.00	33.54	61720
	15.40	33.56	61721
	7.50	38.98	62851
	8.20	32.58	62852
	9.00	13.00	62853
	9.30	7.20	62854
	10.30	7.00	62855
	12.30	13.50	62856
	12.40	5.30	62857
	8.00	12.40	62301
	9.17	21.00	9588
	10.32	5.00	9589
	11.03	3.00	9590
	13.02	6.00	9591
20/2/23	7.00	33.00	61722
	9.15	9.60	61723
	11.10	33.32	61724
	12.40	33.86	61725
	14.25	34.38	61726
	8.10	38.96	62858
	9.45	32.20	62859
	9.45	38.86	62860
	11.10	3.60	62861
	12.55	3.60	62862
	13.00	10.90	62863
	13.35	38.62	62864
	14.55	38.60	62865
	15.00	10.80	62866
	16.40	37.94	62867

	15.05	10.06	62945
	15.15	10.53	62946
	15.50	38.10	62947
	16.00	10.34	62948
	16.15	10.20	62949
16/3/23	7.00	11.50	62950
	7.00	33.60	62087
	7.40	33.54	62088
	8.20	33.54	62089
	9.00	33.56	62090
	9.40	33.50	62091
	10.20	33.52	62092
	11.00	33.50	62093
	13.00	33.54	62094
	13.40	33.54	62095
	14.20	33.52	62096
	15.00	33.52	62097
	15.40	33.52	62098
	7.29	12.00	10015
	7.56	3.00	10016
	9.52	3.00	10017
	10.36	6.00	10018
	11.26	9.00	10019
	12.16	12.00	10020
	7.50	8.54	62101
	8.50	11.50	62102
	8.30	9.00	62103
	9.42	11.04	62104
	10.25	32.42	62105
	10.45	12.00	62106
	9.50	10.50	62107
	11.30	10.54	62108
	12.10	32.42	62109
	12.30	9.00	62110
	13.00	10.16	62111
	14.10	8.50	62112
	14.25	32.22	62113
	14.30	9.74	62114
	14.55	37.96	62115
	15.45	32.58	62116
	16.40	38.78	62117
17/3/23	7.00	33.58	62099
	7.40	33.54	62100
	7.15	11.48	62118
	7.20	9.04	62119
	8.10	10.36	62120
	8.30	30.60	63370
	9.00	9.86	63371
	9.12	30.60	63372
	9.20	12.24	63373
	9.40	9.46	63374
	10.00	30.10	63375
	10.40	12.02	63376
	10.30	12.00	63377
	10.13	28.64	63378
	11.00	11.50	63379
	11.12	9.98	63380
	11.40	11.96	63381
	11.59	30.22	63382
	12.05	3.00	63383
	12.15	30.42	63384
	12.25	32.47	63385
	13.20	11.76	63386
	13.25	9.48	63387
	14.06	29.80	63388
	13.32	9.92	63389
	13.40	39.50	63390
	8.20	33.56	63408
	9.00	33.50	63409
	9.40	33.58	63410
	10.20	33.58	63411
	11.00	33.50	63412
	11.40	33.50	63413
	12.20	33.52	63414
	13.00	33.56	63415
	13.40	33.60	63416
	13.57	27.97	62951
	14.10	33.00	62952
	14.30	12.00	62953
	14.50	9.64	62954
	15.00	30.68	62955
	15.15	10.48	62956
	15.25	32.62	62957
	15.30	29.68	62958
	15.30	12.22	62959
	10.14	0.70	10051
18/3/23	11.52	3.00	10052
	7.00	39.60	62638
	9.15	38.00	62639
	12.00	39.60	62640
20/3/23	7.40	33.52	62567

	7.40	33.58	63051
	8.20	33.54	63052
	9.00	33.52	63053
	9.40	33.56	63054
	10.20	33.50	63055
	11.00	33.52	63056
	11.40	33.50	63057
	12.20	33.56	63058
	7.00	33.22	62683
	7.15	12.50	62684
	7.35	12.50	62685
	8.30	33.42	62686
	9.00	32.12	62687
	9.00	6.72	62688
	9.20	12.50	62689
	10.10	32.42	62690
	10.30	36.18	62691
	10.45	31.00	62692
	10.45	6.72	62693
	11.20	34.46	62694
	11.21	38.00	62695
	11.45	33.04	62696
	12.50	32.60	62697
	13.00	31.60	62698
	8.28	1.50	10067
	8.36	10.70	10068
	13.30	6.72	62454
	14.40	6.72	62455
	15.40	32.42	62456
	15.50	32.70	62457
24/4/23	7.59	8.64	10069
	9.37	1.20	10070
	9.56	2.00	10071
	11.53	2.00	10072
	14.40	10.80	10073
	7.30	39.00	62458
	8.20	32.26	62459
	12.50	39.40	62460
	15.15	32.28	62461
26/4/23	7.00	32.00	62462
	7.15	17.00	62463
	8.50	16.80	62464
	11.42	10.80	62465
	9.00	10.80	62466
	10.55	17.20	62467
	12.50	38.40	62468
	13.10	17.40	62469
	14.30	32.42	62470
	15.00	32.00	62471
	7.33	28.32	10074
	8.00	1.50	10075
	8.59	8.00	10076
	9.02	4.80	10077
	10.08	5.80	10078
	10.29	6.50	10079
	13.14	8.00	10080
	7.00	33.58	63001
	7.40	33.58	63002
	8.20	33.50	63003
	9.00	33.54	63004
	9.40	33.64	63005
	15.00	33.50	63006
	15.30	33.54	63007
	15.30	33.52	63008
	16.00	33.54	63009
	16.10	33.50	63010
	16.40	33.48	63011
	16.50	33.54	63012
	17.00	33.56	63013
27/4/23	9.13	11.24	62472
	10.30	32.00	62473
	12.40	32.08	62474
	13.00	32.50	62475
	7.00	33.50	63014
	7.40	33.56	63015
	8.20	33.52	63016
	9.00	33.52	63017
	9.40	33.58	63018
	10.20	33.50	63019
	13.50	33.56	63020
	14.30	33.50	63021
	15.00	33.54	63022
	15.40	33.54	63023
	14.00	32.00	62699
	7.56	10.20	10081
	8.30	10.20	10082
	11.11	7.20	10083
	12.22	8.40	10084
28/4/23	7.00	2.00	62476
	7.20	24.84	62477
	7.35	38.96	62478

	10.00	11.00	63049
	10.10	18.44	63050
	7.00	33.52	61563
	7.40	33.54	61564
	8.20	33.50	61565
	9.00	33.52	61566
	9.40	33.58	61567
	10.20	33.56	61568
	12.30	33.54	61569
	13.10	33.50	61570
	13.50	33.56	61571
	14.30	33.54	61572
	15.10	33.50	61573
	15.50	33.54	61574
	7.00	12.86	63101
	7.05	13.80	63102
	7.10	12.20	63103
	7.15	12.30	63104
	7.15	12.50	63105
	8.40	12.20	63106
	8.51	11.80	63107
	10.10	12.42	63108
	10.15	12.00	63109
	10.17	3.60	63110
	10.15	12.30	63111
	10.20	12.68	63112
	11.15	32.32	63113
	11.20	12.38	63114
	15.00	12.00	63115
	11.35	12.30	63116
	12.00	12.30	63117
	12.05	12.10	63118
	12.20	33.12	63119
	12.30	32.00	63120
	12.35	33.16	63121
	12.50	20.00	63122
	13.00	12.58	63123
	13.00	11.58	63124
	13.19	3.60	63125
	13.35	12.00	63126
	13.20	12.30	63127
	13.30	12.52	63128
	13.45	33.42	63129
	14.10	32.00	63130
	14.15	32.42	63131
	14.30	12.66	63132
	14.30	13.50	63133
	14.50	38.31	63134
	8.47	5.76	10038
	10.36	13.50	10039
	11.00	5.76	10040
	12.30	18.00	10041
17/5/23	13.10	32.50	61509
	13.30	12.00	61510
	13.45	12.32	61511
	13.15	11.30	61512
	13.40	12.50	61513
	13.40	12.30	61514
	14.00	33.22	61515
	14.30	36.32	61516
	14.55	36.51	61517
	11.10	32.50	63094
	11.30	12.00	63095
	11.30	12.22	63096
	11.35	10.80	63097
	11.45	12.60	63098
	11.45	12.30	63099
	12.45	33.18	63100
	7.00	33.56	61575
	7.40	33.56	61576
	8.20	33.50	61577
	9.00	33.62	61578
	9.10	33.54	61579
	9.40	33.48	61580
	11.00	33.58	61581
	11.40	33.56	61582
	12.20	33.52	61583
	13.10	33.54	61584
	13.50	33.56	61585
	7.00	12.00	63135
	7.00	12.50	63136
	7.00	11.00	63137
	7.05	12.00	63138
	7.23	12.30	63139
	8.30	12.00	63140
	8.35	12.72	63141
	8.45	11.25	63142
	8.50	12.50	63143
	9.00	12.30	63144
	10.15	12.00	63145
	10.00	12.62	63146

	9.30	12.28	62046
	10.00	33.04	62047
	10.20	9.00	62048
	10.45	13.50	62049
	11.00	32.00	62050
	7.00	33.56	63222
	7.40	33.50	63223
	8.20	33.52	63224
	9.00	33.52	63225
	9.40	33.50	63226
	10.20	33.60	63227
	11.00	33.54	63228
	11.40	33.52	63229
	12.20	33.52	63230
	13.00	33.58	63231
	13.40	33.50	63232
	11.00	11.70	67054
	11.05	12.08	67055
	12.00	32.00	67056
	12.00	11.32	67057
	12.15	12.06	67058
	13.00	7.20	67059
	13.00	11.72	67060
	13.25	11.62	67061
	13.45	33.18	67063
	14.30	38.02	67064
	15.00	11.48	67065
	15.10	11.52	67066
16/6/23	7.00	33.58	63233
	7.40	33.54	63168
	8.20	33.54	63169
	9.00	33.56	63170
	9.40	33.52	63171
	10.20	33.50	63172
	11.00	33.56	63173
	11.40	33.50	63174
	12.20	33.50	63175
	13.00	33.58	63176
	13.00	13.00	63177
	7.10	33.75	67009
	8.35	32.00	67010
	8.45	33.22	67011
	10.00	33.18	67012
	10.00	32.15	67013
	11.00	33.12	67014
	11.00	7.20	67015
	11.20	32.35	67016
	12.30	33.18	67017
	12.36	17.50	67018
	12.50	23.00	67019
	14.23	23.00	67019
19/6/23	7.25	33.12	67101
	8.04	6.20	67102
	8.10	33.45	67103
	8.35	32.50	67104
	9.12	6.10	67105
	9.25	33.55	67106
	9.50	36.80	67107
	10.12	6.60	67108
	11.11	6.00	67109
	11.20	6.00	67110
	11.52	5.84	67111
	12.00	5.96	67112
	12.35	6.50	67113
	12.40	5.82	68114
	13.22	6.30	67115
	13.50	6.14	67116
	14.05	6.00	67117
	14.40	6.10	67118
	14.49	6.08	67119
	15.55	37.24	67120
	7.00	33.52	61668
	7.40	33.60	61669
	8.20	33.54	61670
	9.00	33.52	61671
	9.40	33.52	61672
	10.20	33.56	61673
	11.00	33.50	61674
	11.40	33.50	61675
	12.20	33.54	61676
	13.00	33.52	61677
	13.40	33.58	61678
	8.52	1.50	10114
	9.28	14.40	10115
	9.58	9.00	10116
	12.14	7.30	10117
	15.02	6.20	10118
	15.35	6.10	10118
	14.57	14.00	10119
	15.36	39.80	10120
20/6/23	7.00	33.54	61679

	15.00	12.38	9619	
31/1/23	7.00	33.58	61908	
	7.40	33.58	61909	
	8.20	33.52	61910	
	9.00	33.54	61911	
	9.40	33.50	61912	
	10.20	33.54	61913	
	11.00	33.56	61914	
	11.40	33.54	61915	
	9.50	9.00	66240	
	7.45	12.38	9620	
	9.20	11.86	9620	
	10.43	11.58	9620	
	12.00	12.20	9620	
	13.20	12.82	9620	

	7.00	33.62	62302	
	7.40	33.54	62303	
	8.20	33.58	62304	
	9.00	33.50	62305	
	9.40	33.54	62306	
	9.30	24.00	62307	
	14.30	33.52	62308	
	15.10	33.50	62309	
	15.50	33.56	62310	
	16.30	33.54	62311	
	7.06	9.60	9592	
	14.21	1.00	9593	
21/2/23	7.00	33.50	62312	
	7.10	33.58	62313	
	7.40	33.54	62314	
	7.50	33.54	62315	
	8.20	33.52	62316	
	8.30	33.46	62317	
	9.00	33.54	62318	
	9.10	33.56	62319	
	9.00	33.52	62320	
	9.30	13.00	62321	
	12.00	13.00	62322	
	14.20	33.50	62323	
	15.00	33.50	62324	
	9.40	31.00	62868	
	9.00	13.64	62869	
	9.50	13.80	62870	
	9.54	3.60	62871	
	12.00	31.00	62872	
	12.15	8.42	62873	
	11.36	18.00	9594	
	12.33	3.60	62875	
	13.15	32.32	62876	
	13.30	14.64	62877	
	13.35	6.00	62878	
	13.45	32.20	62879	
	14.30	11.72	62880	
	15.00	31.50	62881	
	15.10	32.34	62882	
22/2/23	7.45	32.50	62883	
	9.22	37.15	62884	
	9.55	7.00	62885	
	12.00	9.00	62886	
	7.00	33.56	62325	
	7.40	33.52	62326	
	8.20	33.56	62327	
	9.00	33.54	62328	
	9.40	33.56	62329	
	9.30	13.00	62330	
	11.30	13.00	62331	
	13.00	13.00	62332	
	14.20	33.50	62333	
	15.00	33.58	62334	
	8.29	10.20	9595	
	8.38	34.42	9596	
	8.49	19.59	9597	
	14.19	9.00	9598	
23/2/23	10.00	7.20	62888	
	11.05	11.00	62889	
	13.00	33.55	62890	
	7.00	33.52	62335	
	7.40	33.62	62336	
	8.20	33.58	62337	
	9.00	33.54	62338	
	9.30	13.00	62339	
	11.00	13.00	62340	
	13.00	33.54	62341	
	9.00	14.40	62887	
24/2/23	7.00	33.70	62342	
	7.25	33.70	62343	
	8.00	33.60	62344	
	8.35	33.70	62345	
	9.10	33.60	62346	
	14.15	33.00	63301	
	15.20	6.00	63302	
	16.15	38.18	61993	
	15.00	9.00	61994	
	7.20	32.34	63303	
	7.30	5.26	63304	
	8.50	32.52	63305	
	7.15	24.00	63306	
	10.30	32.38	63307	
	15.35	32.20	63308	
	16.25	38.78	63309	
	9.50	33.60	61995	
	10.30	33.50	61996	
	12.05	33.50	61997	
	13.15	33.50	61998	
	14.35	33.80	61999	
25/2/23	8.10	20.00	63310	

	8.20	33.56	62568	
	9.00	33.60	62569	
	9.40	33.48	62570	
	10.20	33.56	62571	
	11.00	33.50	62572	
	11.40	33.54	62573	
	11.00	7.86	63391	
	11.15	9.48	63392	
	11.30	35.00	63393	
	11.30	35.00	63393	
	11.40	32.42	63394	
	11.45	11.64	63395	
	13.00	10.46	63396	
	10.35	38.72	63417	
	10.25	32.18	63418	
	16.20	32.45	63419	
	7.30	10.44	62641	
	7.45	32.22	62642	
	7.50	9.22	62643	
	8.10	11.86	62644	
	8.45	9.60	62645	
	9.00	32.00	62646	
	9.05	32.52	62647	
	9.15	10.32	62648	
	9.30	10.00	62649	
	9.50	11.28	62650	
	9.02	10.00	10053	
	11.42	6.00	10054	
	13.18	9.60	10055	
21/3/23	7.00	33.54	62574	
	7.40	33.54	62575	
	8.20	33.50	62576	
	9.00	33.58	62577	
	9.40	33.56	62578	
	10.20	33.56	62579	
	11.00	33.50	62580	
	11.40	33.60	62581	
	12.20	33.52	62582	
	7.05	22.42	63420	
	8.20	39.28	63421	
	9.30	32.20	63422	
	12.30	32.66	63423	
	13.00	32.50	63424	
	16.00	32.54	63425	
	7.06	10.40	10056	
	7.10	7.00	10057	
	7.15	7.00	10057	
	9.20	6.20	10057	
	10.40	7.00	10057	
	11.00	6.20	10057	
	11.20	7.00	10057	
	12.10	6.00	10057	
	13.00	7.00	10057	
	14.40	6.20	10057	
	14.50	7.00	10057	
	7.12	7.00	10058	
	10.10	2.40	62960	
22/3/23	7.02	10.50	10059	
	7.00	6.20	10060	
	12.30	7.00	10060	
	12.30	7.00	10060	
	7.00	7.00	10060	
	7.15	7.00	10060	
	9.00	6.00	10060	
	9.10	7.20	10060	
	9.10	7.00	10060	
	10.30	6.00	10060	
	10.30	7.00	10060	
	10.35	7.00	10060	
	12.10	6.30	10060	
	14.15	6.00	10060	
	7.00	33.56	62583	
	7.40	33.54	62584	
	8.20	33.54	62585	
	9.00	33.50	62586	
	9.40	33.54	62587	
	10.20	33.58	62588	
	11.00	33.52	62589	
	11.40	33.56	62590	
	12.20	33.50	62591	
	13.00	33.52	62592	
	13.10	33.56	62593	
	14.45	33.52	62594	
	14.50	33.54	62595	
	7.50	32.37	63426	
	9.10	32.32	63427	
	14.25	11.90	63428	
	15.30	32.62	63429	
23/3/23	7.10	6.10	10061	
	7.15	7.00	10061	
	9.00	7.50	10061	

	7.00	33.54	63024	
	7.40	33.58	63025	
	8.20	33.60	63026	
	14.45	32.26	62700	
	8.30	6.50	62748	
	9.05	38.58	62749	
	9.30	26.88	62750	
	8.15	10.80	10085	
	13.08	13.50	9745	
	10.45	38.40	63059	
	11.10	25.72	63060	
	12.00	2.00	63061	
	13.15	28.38	63063	
	9.00	33.58	63283	
	9.40	33.50	63284	
	10.20	33.52	63285	
	11.00	33.54	63286	
	12.30	33.50	63287	
	13.10	33.52	63288	
	13.50	33.52	63289	
	14.30	33.60	63290	

	10.20	12.25	63147	
	10.30	12.00	63148	
	10.30	12.30	63149	
	10.45	33.22	63150	
18/5/23	7.00	33.54	61586	
	7.10	33.50	61587	
	7.40	33.50	61588	
	8.20	33.54	61589	
	9.00	33.52	61590	
	9.40	33.58	61591	
	10.20	33.56	61592	
	11.00	33.50	61593	
	11.40	33.56	61594	
	11.40	33.50	61595	
	12.50	33.50	61596	
	14.00	33.50	61597	
	14.40	33.52	61598	
	15.35	34.04	66701	
	7.05	13.04	61518	
	7.05	12.52	61519	
	7.10	12.00	61520	
	7.15	12.00	61521	
	7.50	31.78	61522	
	9.00	31.80	61523	
	9.05	12.18	61524	
	9.10	12.50	61525	
	9.17	12.00	61526	
	9.20	12.00	61527	
	10.00	32.06	61528	
	10.15	12.92	61529	
	10.30	12.60	61530	
	10.31	12.00	61531	
	10.30	12.00	61532	
	11.00	31.02	61533	
	11.30	12.50	61535	
	12.00	31.34	61536	
	12.00	13.00	61537	
	12.05	12.00	61538	
	12.10	12.00	61539	
	13.00	32.02	61540	
	13.00	3.60	61541	
	14.00	11.82	61542	
	14.00	11.64	61543	
	14.10	12.00	61544	
	14.15	12.50	61545	
	14.10	12.00	61546	
	14.10	33.64	61547	
	14.30	18.48	61548	
	15.20	39.55	61549	
	15.30	32.00	61550	
19/5/23	7.00	33.54	61599	
	7.40	33.58	61600	
	8.20	33.54	66751	
	9.00	33.52	66752	
	9.00	33.50	66753	
	10.30	33.50	66754	
	12.00	33.50	66755	
	13.10	33.50	66756	
	14.30	33.50	66757	
	15.10	33.48	66758	
	7.00	11.40	66801	
	7.10	12.00	66802	
	7.17	12.20	66803	
	7.20	11.00	66804	
	8.30	33.27	66805	
	8.40	11.66	66806	
	8.30	11.50	66807	
	8.45	12.54	66808	
	8.45	12.00	66809	
	8.30	24.00	66810	
	8.45	11.00	66811	
	10.10	12.90	66812	
	10.30	12.56	66813	
	10.35	11.60	66814	
	10.50	11.00	66815	
	11.15	32.14	66816	
	11.30	31.50	66817	
	11.40	11.94	66819	
	11.50	11.50	66820	
	11.30	12.00	66821	
	11.32	12.00	66822	
	12.00	11.34	66823	
	12.05	11.00	66824	
	13.00	32.10	66825	
	13.10	11.32	66826	
	13.20	32.00	66827	
	13.40	11.70	66828	
	13.45	12.00	66829	
	13.45	11.28	66830	
	13.45	12.00	66831	
	14.00	32.62	66832	

	7.40	33.54	61680	
	8.20	33.58	61681	
	9.00	33.52	61682	
	9.40	33.56	61683	
	10.20	33.50	61684	
	11.00	33.50	61685	
	11.40	33.52	61686	
	12.20	33.54	61687	
	13.00	33.52	61688	
	13.40	33.62	61689	
	14.20	33.58	61690	
	15.00	33.52	61691	
	7.41	6.10	67121	
	8.28	5.78	67122	
	9.15	6.40	67123	
	10.15	6.10	67124	
	11.14	5.78	67125	
	11.35	31.60	67126	
	12.05	6.10	67127	
	12.45	33.07	67128	
	13.20	6.06	67129	
	13.40	31.76	67130	
	14.00	31.44	67131	
	14.05	6.10	67132	
	9.03	4.00	10121	
	10.56	15.00	10122	
	14.49	6.00	10123	
21/6/23	7.00	33.52	61692	
	7.10	33.56	61693	
	7.40	33.50	61694	
	7.50	33.54	61695	
	8.20	33.54	61696	
	8.30	33.52	61697	
	9.00	33.50	61698	
	9.10	33.56	61699	
	9.40	33.58	61700	
	7.15	33.07	67133	
	7.30	32.50	67134	
	8.25	38.30	67135	
	8.45	33.12	67136	
	9.55	37.08	67137	
	10.00	6.16	67138	
	10.00	33.08	67139	
	10.48	7.12	67140	
	11.46	6.16	67141	
	12.10	14.00	67142	
	13.30	12.00	67143	
	12.30	23.10	67144	
	13.30	32.76	67145	
	7.32	9.00	10124	
	7.37	6.00	10125	
	13.38	4.00	10126	
22/6/23	7.25	12.08	67146	
	9.15	19.20	67147	
	9.25	32.96	67148	
	9.50	40.00	67149	
	10.00	20.00	67150	
	10.35	33.24	67020	
	12.30	33.04	67021	
	12.30	19.20	67022	
	15.20	33.98	67023	
	7.00	33.54	67151	
	7.10	33.60	67152	
	7.40	33.56	67153	
	7.50	33.52	67154	
	8.20	33.50	67155	
	8.30	33.58	67156	
	9.00	33.54	67157	
	9.10	33.54	67158	
	9.40	33.46	67159	
	10.00	33.52	67160	
	10.40	33.52	67161	
	7.35	18.00	10127	
	8.03	1.50	10128	
	10.16	7.80	10129	
23/6/23	7.34	17.28	67024	
	7.00	33.50	67162	
	7.10	33.56	67163	
	7.40	32.00	67164	
	7.43	6.10	10130	
	7.40	33.52	63235	
	7.50	33.54	63236	
	8.20	33.52	63237	
	8.30	33.58	63238	
	9.00	33.58	63239	
	9.10	33.50	63240	
	9.30	33.50	63241	
	9.30	33.50	63242	
	11.00	33.50	63243	
	11.00	33.50	63244	
	12.20	33.50	63245	

	11.00	29.10	63311
27/2/23	7.00	33.50	62000
	7.10	32.48	63312
	7.40	33.64	63313
	8.20	33.58	63314
	9.00	33.54	63315
	9.40	33.48	63316
	10.40	33.56	63317
	11.20	33.52	63318
	12.00	33.58	63319
	12.30	33.54	63320
	13.10	33.50	63321
	13.50	33.50	63322
	14.30	33.54	63323
	16.50	37.16	62803
	8.10	32.56	62293
	9.00	6.00	62294
	9.00	1.20	62295
	12.10	5.00	62296
	12.30	7.20	62297
	13.15	39.00	62298
	14.30	32.54	62299
	15.45	32.02	62300
28/2/23	7.00	33.56	63324
	7.40	33.54	63325
	8.20	33.54	63326
	9.00	33.58	63327
	9.40	33.54	63328
	10.20	33.56	63329
	11.00	33.50	63330
	11.40	33.52	63331
	12.20	33.52	63332
	8.29	36.70	62804
	9.50	3.60	62806
	11.00	9.18	62807
	11.40	38.00	62808
	11.45	32.52	62809
	12.08	9.50	62810
	12.50	11.00	62811
	12.50	25.40	62812
	13.30	33.24	62813
	14.45	32.18	62814
	15.10	37.36	62815
	15.46	32.37	62816
	16.55	37.70	62817

	10.40	6.20	10061
	10.40	7.00	10061
	12.30	7.00	10061
	12.40	6.20	10061
	12.40	7.20	10061
	7.24	37.35	10062
	10.34	22.00	10063
	13.24	29.00	10064
	7.00	33.50	62596
	7.10	33.56	62597
	7.40	33.52	62598
	7.50	33.52	62599
	8.20	33.56	62600
	8.00	30.00	63430
	8.00	19.20	63430
	7.50	21.60	63431
	9.45	32.70	63432
	10.10	32.16	63433
	12.00	1.00	63434
	12.00	32.20	63435
	13.20	32.68	63436
	15.00	32.25	63437
	8.30	33.62	62961
	10.00	33.54	62962
	10.20	33.46	62963
	12.10	33.56	62964
	12.20	33.52	62965
	14.15	33.70	62966
	13.30	11.36	63397
	13.50	6.00	63398
	15.00	9.72	63399
	15.15	11.46	63400
24/3/23	7.00	33.60	62967
	7.30	33.70	62968
	8.00	33.60	62969
	8.50	33.65	62970
	9.30	33.75	62971
	10.10	33.60	62972
	10.45	33.60	62973
	11.30	33.70	62974
	7.20	25.30	62151
	7.30	10.00	62152
	7.58	38.94	62153
	8.30	10.80	62154
	11.15	33.08	62155
	12.00	39.00	62156
	13.40	12.00	62157
	14.32	17.94	62121
	15.00	32.82	62122
	16.15	38.28	62123
	11.29	5.00	9625
27/3/23	7.00	21.60	62124
	11.15	24.00	62125
	7.17	7.66	9730
	7.27	7.70	9730
	7.00	33.58	62201
	7.40	33.58	62202
	8.20	33.54	62203
	9.00	33.62	62204
	9.40	33.62	62205
	10.50	33.54	62206
	11.00	33.50	62207
	11.40	33.52	62208
	12.30	33.50	62209
28/3/23	7.00	33.56	62210
	7.40	33.54	62211
	8.20	33.50	62212
	9.00	33.54	62213
	9.40	33.52	62214
	10.20	33.54	62215
	11.00	33.58	62216
	11.40	33.50	62217
	12.20	33.52	62218
	13.00	33.54	62219
	13.40	33.50	62220
	14.20	33.60	62221
	7.50	28.08	62126
	7.00	24.00	62127
	10.00	33.70	62128
	12.00	32.00	62129
	11.00	24.00	62130
	7.15	7.20	9731
	7.19	7.20	9731
	9.00	7.00	9731
	9.03	8.00	9731
	11.05	7.20	9731
	11.10	7.16	9731
	11.30	7.24	9731
29/3/23	7.00	33.50	62222
	7.40	33.56	62223
	8.20	33.54	62224

	14.05	11.00	66833
	14.15	11.98	66834
	14.20	32.02	66835
	14.30	32.00	66836
	14.45	39.28	66837
	13.08	2.40	9641
	15.25	10.90	66651
22/5/23	12.11	7.93	9642
	7.00	11.84	66652
	7.10	11.70	66653
	8.50	11.98	66654
	8.55	11.70	66655
	9.00	12.26	66656
	9.05	12.00	66657
	9.55	11.00	66658
	10.15	11.84	66659
	10.20	12.20	66660
	10.30	12.48	66661
	10.32	12.00	66662
	11.40	11.64	66663
	11.40	12.00	66664
	11.50	12.00	66665
	12.00	11.40	66666
	12.15	10.96	66667
	13.50	11.96	66668
	14.00	12.00	66669
	14.00	12.00	66670
	15.00	11.24	66671
	7.15	11.60	66838
	7.10	12.00	66839
	7.10	11.80	66840
	7.40	32.00	66841
	8.30	35.00	66842
	9.00	33.00	66843
	10.10	33.05	66844
	11.30	5.00	66845
	14.00	11.80	66846
	14.10	33.27	66847
	7.00	33.64	66702
	7.50	33.52	66703
	8.30	33.54	66704
	9.00	33.54	66705
23/5/23	7.00	33.50	66706
	7.40	33.56	66707
	8.20	33.54	66708
	9.00	33.54	66709
	9.40	33.50	66710
	7.08	11.00	66672
	7.10	12.50	66673
	7.15	12.00	66674
	7.00	12.96	66675
	7.30	10.32	66676
	8.40	12.30	66677
	8.45	12.00	66678
	9.10	12.00	66679
	9.00	6.00	66680
	10.15	33.22	66681
	10.40	12.00	66682
	10.20	12.60	66683
	10.30	12.00	66684
	10.00	10.08	66685
	11.00	19.20	66686
	11.40	11.00	66687
	12.00	12.00	66688
	12.10	12.70	66689
	13.00	6.30	66690
	13.30	12.50	66691
	13.40	12.00	66692
	13.48	12.40	66693
	14.00	12.00	66694
	14.00	33.60	66695
	15.00	12.00	66696
	15.15	12.00	66697
	7.15	33.12	66848
	9.39	13.50	66849
	11.00	12.50	66850
	15.08	35.00	9643
	15.08	23.00	9643
24/5/23	7.00	33.56	66711
	7.40	33.50	66712
	8.20	33.50	66713
	9.00	33.52	66714
	9.40	33.58	66715
	10.20	33.52	66716
	11.00	33.56	66717
	11.40	33.52	66718
	12.20	33.54	66719
	13.00	33.54	66720
	13.40	33.50	66721
	14.20	33.58	66722
	7.05	13.00	66698

	13.00	33.50	63246
	13.40	33.54	63247
	14.20	33.52	63248
	8.00	11.80	63178
	9.00	33.12	63179
	9.55	3.50	63180
	9.59	3.50	63181
	10.40	33.00	63182
	11.06	3.84	63183
	11.35	33.32	63184
	12.45	33.22	63185
	14.00	32.00	63186
	14.00	33.12	63187
	14.45	33.96	63188
	15.50	39.70	67067
26/6/23	7.40	33.12	67068
	8.10	33.54	67069
	8.00	33.08	67070
	9.45	33.52	67071
	10.20	33.08	67072
	11.45	33.22	67073
	14.00	33.18	67074
	14.45	39.66	67075
	7.00	33.56	67851
	7.40	33.52	67852
	8.20	33.54	67853
	9.00	33.52	67854
	9.40	33.50	67855
	10.20	33.50	67856
	11.30	33.50	67857
	13.00	33.50	67858
	14.10	33.54	67859
	14.50	33.50	67860
	15.30	33.54	67861
	16.10	33.58	67862
	16.50	33.54	67863
	9.10	2.00	10090
27/6/23	8.00	36.64	67076
	8.00	10.64	67077
	8.15	34.00	67078
	9.35	34.00	67079
	10.20	40.30	67080
	7.00	33.58	67864
	7.40	33.64	67865
	8.20	33.52	67866
	9.00	33.50	67867
	9.40	33.54	67868
	10.20	33.52	67869
	11.00	33.50	67870
	12.20	33.54	67871
	13.00	33.54	67872
	13.40	33.56	67873
	14.20	33.52	67874
	8.00	12.06	10091
	9.15	12.42	10091
	10.40	12.22	10091
	12.05	11.00	10091
	13.28	12.44	10091
	11.58	11.00	9649
	14.09	11.00	9650
	14.35	10.50	9650
	14.55	10.58	9650
	15.15	10.52	9650
	15.45	10.60	9650
	12.50	3.50	67081
	14.45	36.64	67082
	16.15	38.96	67083
28/6/23	8.30	33.22	67084
	9.30	33.08	67085
	10.1	32.50	67086
	10.45	33.12	67087
	11.00	9.60	67088
	11.43	5.38	67089
	13.35	33.22	67091
	7.00	33.56	67875
	7.40	33.52	67876
	8.20	33.60	67877
	9.00	33.54	67878
	9.40	33.54	67879
	10.20	33.50	67880
	11.00	33.54	67881
	11.40	33.54	67882
	12.30	33.52	67883
	8.23	1.00	10092
	8.28	6.00	10093
	11.26	6.27	10094
	11.28	22.04	10095
	12.15	4.00	10096
	12.53	12.00	10097
	14.08	3.50	10098
	14.53	1.00	10099

	9.00	33.48	62225
	9.40	33.52	62226
	10.20	33.54	62227
	11.00	33.54	62228
	11.40	33.58	62229
	12.20	33.56	62230
	13.00	33.52	62231
	7.15	7.20	9732
	7.19	7.62	9732
	9.34	7.34	9732
	9.56	6.36	9732
	11.40	6.80	9732
	11.45	6.38	9732
	13.00	7.10	9732
	7.00	24.00	62131
	8.15	11.28	62132
	11.10	21.70	62133
	12.00	11.98	62134
	12.60	10.00	62135
	14.23	37.04	62136
	7.21	10.00	9626
	8.15	11.00	9626
	8.55	10.00	9626
	9.35	10.00	9626
	10.05	11.00	9626
	9.16	10.80	9627
30/3/23	7.00	33.50	62232
	7.40	33.52	62233
	8.20	33.62	62234
	9.00	33.56	62235
	9.40	33.58	62236
	10.20	33.64	62237
	11.00	33.58	62238
	11.40	33.52	62239
	12.20	33.52	62240
	13.00	33.50	62241
	13.40	33.56	62242
	14.20	33.50	62243
	7.00	6.50	9733
	7.15	7.50	9733
	7.18	7.30	9733
	9.10	7.20	9733
	9.15	6.00	9733
	9.45	6.94	9733
	10.38	7.10	9733
	11.30	6.30	9733
	11.35	7.82	9733
	13.00	7.35	9733
	13.50	6.00	9733
	7.10	9.00	62137
	9.18	24.00	62138
	12.21	37.02	62139
	14.45	32.34	62140
	7.46	10.80	9628
	8.30	5.00	9629
31/3/23	7.00	33.54	62244
	7.40	33.56	62245
	7.00	6.70	9734
	7.10	8.12	9734
	7.20	8.10	9734
	7.05	6.00	9630
	8.05	8.65	9631
	9.36	0.43	10065
	15.08	2.00	10066
	8.55	6.20	10021
	8.58	7.10	10021
	9.00	7.34	10021
	10.12	7.00	10021
	10.30	7.38	10021
	10.50	6.20	10021
	12.56	7.10	10021
	13.00	7.10	10021
	13.40	6.00	10021
	8.20	33.52	62751
	9.00	33.50	62752
	9.40	33.50	62753
	10.20	33.54	62754
	11.00	33.52	62755
	11.40	33.50	62756
	12.20	33.56	62757
	13.00	33.52	62758
	13.40	33.52	62759
	14.20	33.58	62760
	11.50	9.60	62158

	7.17	11.20	66699
	8.00	32.00	66700
	8.50	32.00	61601
	8.40	12.00	61602
	8.50	32.62	61603
	9.00	12.30	61604
	9.05	11.20	61605
	9.00	11.00	61606
	10.10	11.50	61607
	10.20	12.50	61608
	10.23	11.20	61609
	10.3	32.00	61610
	10.30	11.50	61611
	11.15	11.50	61612
	12.20	12.35	61614
	12.06	11.00	61615
	12.10	11.10	61616
	12.40	11.50	61617
	13.40	31.90	61618
	13.57	11.40	61619
	14.10	11.96	61620
	14.10	11.30	61621
	14.05	33.12	61622
	14.30	11.50	61623
	15.05	31.80	61624
	15.45	39.64	61625
	7.32	1.10	9644
	11.57	1.30	9645
	16.33	14.50	9646
25/5/23	7.00	33.56	66723
	7.10	33.52	66724
	7.40	33.64	66725
	7.50	33.56	66726
	8.20	33.50	66727
	8.30	33.54	66728
	9.00	33.52	66729
	9.10	33.54	66730
	9.40	33.50	66731
	9.50	33.60	66732
	10.00	32.00	66733
	15.10	33.54	66734
	16.00	33.54	66735
	7.05	11.50	66851
	7.20	11.60	66852
	7.17	11.20	66853
	8.35	11.00	66854
	8.48	11.50	66855
	8.48	11.50	66856
	9.25	4.30	66857
	9.45	10.90	66858
	10.00	39.38	66859
	10.24	11.20	66860
	11.00	11.00	66861
	11.30	39.04	66862
	11.53	11.10	66863
	12.10	12.00	66864
	13.35	11.90	66865
	13.55	11.00	66866
	14.35	31.90	66867
	14.41	17.92	66868
	14.55	11.50	66869
	16.10	12.20	66870
	16.50	38.80	66871
	10.21	17.90	66872
	13.16	10.00	10101
	15.06	6.00	10102
	15.16	14.50	10103
	15.30	14.50	10103
	15.45	14.5	10103
	15.55	14.50	10103
	16.10	14.50	10103
26/5/23	9.43	1.90	10104
	7.00	33.54	66736
	7.10	33.54	66737
	7.40	33.50	66738
	7.50	33.52	66739
	8.20	33.56	66740
	8.30	33.54	66741
	9.00	33.58	66742
	9.40	33.52	66743
	10.20	33.54	66744
	11.00	33.50	66745
	11.40	33.58	66746
	10.30	32.60	66873
	11.00	32.50	66874
	16.12	32.60	66951
29/5/23	7.30	11.50	66952
	8.40	32.00	66953
	8.50	33.88	66954
	9.00	11.60	66955
	10.00	32.00	66956

	17.05	12.00	10100
29/6/23	7.00	33.58	67884
	7.00	33.52	67885
	7.40	33.56	67886
	7.50	33.58	67887
	8.20	33.50	67888
	8.30	33.52	67889
	9.00	33.50	67890
	9.10	33.50	67891
	9.40	33.54	67892
	9.50	33.48	67893
	10.20	32.00	67894
	10.30	33.56	67895
	8.10	33.12	67092
	8.15	33.32	67093
	9.15	11.50	67094
	9.30	33.08	67095
	10.00	39.22	67096
	10.45	33.12	67097
	11.30	33.90	67098
	11.35	11.50	67099
	13.00	33.12	67100
	7.57	12.50	10131
	10.44	18.00	10132
	11.04	3.00	10133
	15.00	18.12	63189
	15.00	39.24	63190
	16.34	0.48	63191
	7.05	11.60	63250
	10.30	34.56	68751
30/6/23	8.20	33.54	68752
	8.30	33.62	68753
	9.00	33.52	68754
	9.10	33.50	68755
	9.40	33.56	68756
	10.20	33.50	68757
	10.30	33.50	68758
	11.00	33.52	68759
	11.10	33.54	68760
	9.05	33.80	67165
	10.05	33.08	67166
	7.00	33.54	67896
	7.10	33.56	67897
	7.40	33.56	67898
	7.50	33.52	67899
	7.10	33.18	63192
	7.39	17.28	63193
	7.50	32.94	63194
	8.30	33.22	63195
	11.40	33.11	67025
	12.20	32.78	67026
	13.10	14.40	67027

	10.00	39.00	66957
	11.40	32.00	66958
	12.30	32.05	66959
	14.00	33.03	66960
	14.10	33.68	66961
	7.30	4.20	66759
	7.00	33.50	66901
	7.40	33.56	66902
	8.20	33.52	66903
	9.00	33.54	66904
	9.40	33.52	66905
	10.20	33.56	66906
	11.00	33.54	66907
	11.40	33.54	66908
	12.20	33.58	66909
	7.59	7.80	10087
30/5/23	7.40	9.00	66962
	8.00	11.78	66963
	8.30	12.20	66964
	9.15	39.40	66965
	9.25	32.78	66966
	9.45	33.60	66967
	10.30	32.50	66968
	11.15	12.20	66969
	11.15	33.62	66970
	13.15	38.40	66971
	13.20	32.80	66972
	13.40	12.20	66973
	14.00	12.18	66974
	15.10	12.10	66975
	15.50	11.94	66976
	7.10	17.50	66760
	7.20	17.28	66761
	9.00	17.00	66762
	7.00	33.58	66910
	7.40	33.54	66911
	8.20	33.58	66912
	9.00	33.52	66913
	9.40	33.52	66914
	10.20	33.60	66915
	11.00	33.54	66916
	11.40	33.50	66917
	12.20	33.52	66918
	13.00	33.64	66919
	13.45	33.52	66920
	11.00	17.28	66747
	10.20	12.40	66875
	11.30	11.80	66876
31/5/23	7.10	33.22	66977
	7.20	12.20	66978
	8.20	40.00	66979
	8.30	33.12	66980
	9.45	39.40	66981
	12.00	33.22	66982
	14.40	32.70	66983
	16.20	32.42	66984
	7.00	33.54	66921
	7.40	33.52	66922
	8.20	33.58	66923
	9.00	33.56	66924
	9.40	33.50	66925
	10.20	33.56	66926
	11.00	33.58	66927
	11.40	33.58	66928
	12.20	33.56	66929
	13.00	33.52	66930
	13.40	33.52	66931
	14.20	33.52	66932
	7.55	33.62	66877
	11.15	33.74	66878
	16.10	33.84	66879
	9.04	5.28	10042
	11.17	5.28	10043

Date	Time	Tonne	Docket Number	Total Tonnes
		July		
3/7/23	7.10	40.00	68801	12,337.60
	7.30	33.22	68802	
	8.10	32.76	68803	
	8.30	33.26	68804	
	9.00	37.96	68805	
	9.45	33.18	68806	
	10.30	17.28	68807	
	11.00	33.08	68808	
	13.15	38.60	68809	
	13.30	2.16	68810	
	14.25	5.78	68811	
	15.00	2.64	68812	
	15.35	39.36	68813	
	7.00	33.56	68851	
	7.40	33.50	68852	
	8.20	33.52	68853	
	9.00	33.52	68854	
	9.40	33.50	68855	
	10.20	33.54	68856	
	11.00	33.54	68857	
	11.40	33.46	68858	
	12.20	33.56	68859	
	13.00	33.54	68860	
	13.40	33.50	68861	
	14.20	33.50	68862	
	15.00	33.58	68863	
	11.03	2.80	9857	
4/7/23	8.00	3.36	68814	
	8.25	11.00	68815	
	9.00	7.16	68816	
	9.20	31.40	68817	
	13.43	0.72	68818	
	7.00	33.52	68864	
	7.10	33.56	68865	
	7.40	33.56	68866	
	7.50	33.54	68867	
	8.20	33.54	68868	
	9.00	33.50	68869	
	9.40	33.58	68870	
	10.20	33.54	68871	
	11.00	33.58	68872	
	11.40	33.54	68873	
	7.47	5.70	9858	
	9.42	44.40	9859	
5/7/23	7.15	33.12	68819	
	8.30	32.92	68820	
	10.50	9.82	68821	
	11.30	33.12	68822	
	11.55	3.22	68823	
	13.00	7.00	68824	
	13.40	33.12	68825	
	15.00	34.00	68826	
	15.10	39.64	68827	
	7.30	33.52	68874	
	8.10	33.52	68875	
	9.00	33.54	68876	
	10.20	33.50	68877	
	11.40	33.54	68878	
	13.00	33.52	68879	
	9.39	2.40	9860	
	16.12	8.40	9861	
6/7/23	7.00	33.56	68880	
	7.40	33.62	68881	
	8.20	33.52	68882	
	9.00	33.52	68883	
	9.40	33.56	68884	
	10.20	33.50	68885	
	11.00	33.52	68886	
	11.40	33.52	68887	
	12.20	33.58	68888	
	13.00	33.54	68889	
	13.40	33.48	68890	
	14.20	33.50	68891	
	8.00	3.60	68828	
	9.30	33.21	68829	
	9.50	39.58	68830	
	10.30	38.78	68831	
	10.45	33.07	68832	
	12.00	12.48	68833	
	12.00	20.00	68834	
	13.07	6.52	68835	
	13.10	12.50	68836	
	9.42	0.50	9862	
	10.04	3.60	9863	
7/7/23	7.00	33.52	68892	
	7.40	33.58	68893	
	8.20	33.54	68894	
	9.20	33.12	68837	
	8.00	4.00	68838	
	8.45	33.17	63196	

Date	Time	Tonne	Docket Number	Total Tonnes
		August		
1/8/23	7.00	6.00	67211	17,953.20
	7.25	33.06	67212	
	7.00	24.00	67213	
	7.30	19.12	67214	
	7.30	20.26	67215	
	8.50	33.12	67216	
	10.00	12.14	67351	
	10.15	33.09	67352	
	10.30	19.26	67353	
	10.30	20.12	67354	
	10.35	11.88	67355	
	10.55	33.04	67356	
	11.30	33.12	67357	
	11.00	24.00	67358	
	13.25	19.42	67359	
	13.30	20.26	67360	
	13.40	11.78	67361	
	13.40	32.50	67362	
	13.15	17.08	67363	
	14.30	33.06	67364	
	15.40	33.78	67365	
	7.40	33.56	67964	
	8.20	33.50	67965	
	8.30	17.23	67966	
	9.25	12.55	67401	
	9.30	11.06	67402	
	11.00	17.00	67403	
	10.45	11.36	67404	
	10.15	17.46	67405	
	15.00	8.00	67406	
	11.57	3.48	67407	
	12.25	11.40	67408	
	12.34	12.70	67409	
	11.45	17.39	67410	
	13.30	32.00	67411	
	13.30	11.22	67412	
	14.35	11.12	67413	
	14.50	12.02	67414	
	15.00	17.07	67415	
	16.14	39.40	67416	
	9.00	33.54	67906	
	9.40	33.58	67907	
	10.20	33.50	67908	
	11.00	33.52	67909	
	11.40	33.50	67910	
	12.40	33.56	67911	
	13.00	33.46	67912	
	13.40	33.52	67913	
	14.50	33.60	67914	
	16.20	33.56	67915	
	17.00	33.48	67916	
	9.56	21.60	10160	
	11.31	32.00	10161	
	12.46	16.80	10162	
	16.09	38.90	10163	
2/8/23	7.05	19.46	68053	
	7.06	19.28	68054	
	7.15	17.66	68055	
	7.25	16.04	68057	
	7.29	12.14	68058	
	7.35	12.36	68059	
	8.00	18.50	68060	
	8.15	38.98	68061	
	8.45	17.50	68062	
	8.55	12.48	68063	
	9.05	12.68	68064	
	9.57	19.16	68065	
	10.05	17.90	68066	
	10.10	39.62	68067	
	10.05	19.60	68068	
	10.00	11.60	68069	
	10.20	16.90	68070	
	10.15	12.00	68071	
	10.15	17.64	68072	
	10.30	17.90	68073	
	10.45	18.60	68075	
	11.00	17.50	68076	
	11.10	6.18	68077	
	11.25	11.34	68078	
	11.47	12.26	68079	
	11.55	17.02	68080	
	12.30	19.30	68081	
	12.40	10.38	68082	
	12.50	11.76	68083	
	12.00	17.50	68084	
	12.50	17.41	68085	
	13.00	39.62	68086	
	13.15	19.00	68087	
	13.20	19.40	68088	
	13.25	36.10	68089	

Date	Time	Tonne	Docket Number	Total Tonnes
		September		
1/9/23	7.00	17.00	68297	14,844.07
	7.20	10.00	68298	
	7.00	36.48	68299	
	7.35	19.64	68300	
	7.00	33.54	68321	
	7.40	33.58	68322	
	12.35	17.00	67751	
	13.10	25.18	67752	
	13.40	19.76	67753	
	13.50	17.86	67754	
	7.35	25.62	68201	
	7.40	17.88	68202	
	7.50	16.14	68203	
	8.45	18.16	68204	
	9.15	11.50	68205	
	9.14	15.44	68206	
	10.05	17.00	68207	
	10.08	15.32	68208	
	10.09	17.46	68209	
	10.30	19.54	68210	
	10.40	17.96	68211	
	11.15	10.00	68212	
	11.00	11.50	68213	
	10.30	38.40	68214	
	8.20	33.50	67701	
	9.00	33.52	67702	
	9.30	33.50	67703	
	10.30	33.50	67704	
	11.20	33.50	67705	
	12.30	33.50	67706	
	13.10	33.52	67707	
	15.30	33.34	68365	
2/9/23	11.05	39.64	68323	
4/9/23	7.00	33.58	68324	
	7.50	33.50	68325	
	8.20	33.52	68326	
	9.00	33.50	68327	
	9.40	33.56	68328	
	10.20	33.54	68329	
	11.00	33.50	68330	
	11.40	33.54	68331	
	12.20	33.54	68332	
	7.00	36.48	67570	
	8.35	39.52	67571	
	8.30	9.50	67572	
	10.00	39.58	67573	
	10.00	38.40	67574	
	11.40	32.40	67575	
	12.00	12.00	67576	
	12.30	8.50	67577	
	13.30	32.40	67578	
	13.00	38.40	67579	
	13.50	39.58	67580	
	15.10	39.28	67581	
	15.50	25.42	67582	
5/9/23	7.30	20.00	67583	
	7.35	19.52	67584	
	7.00	36.48	67585	
	8.25	39.58	67586	
	9.30	25.86	67587	
	10.00	39.62	67588	
	10.30	20.00	67589	
	10.40	19.58	67590	
	10.00	38.40	67591	
	13.20	19.88	67592	
	13.28	19.64	67593	
	14.15	33.24	67594	
	15.10	25.46	67595	
	15.50	32.82	67596	
	7.00	33.50	68333	
	7.40	33.56	68334	
	8.20	33.54	68335	
	9.00	33.54	68336	
	9.40	33.52	68337	
	10.20	33.56	68338	
	11.00	33.50	68339	
	11.40	33.48	68340	
	12.20	33.52	68341	
	13.00	33.52	68342	
	13.00	13.00	68343	
	13.40	13.00	68344	
	8.15	6.00	68366	
	8.15	21.00	68367	
	8.20	6.00	68368	
	10.55	20.70	68369	
	11.40	4.00	68370	
	13.00	38.40	68371	
	13.55	20.90	68372	
	14.47	6.30	68374	
	16.10	37.84	68375	

Date	Time	Tonne	Docket Number	Total Tonnes
		October		
3/10/23	7.00	33.52	70163	14,275.10
	7.40	33.60	70164	
	8.20	33.54	70165	
	9.00	33.54	70166	
	9.40	33.50	70167	
	12.10	33.52	70168	
	12.40	33.58	70169	
	13.30	33.50	70170	
	14.10	33.52	70171	
	15.00	33.56	70172	
	11.00	32.72	67844	
	13.30	32.00	67845	
	13.10	33.01	67846	
	13.20	20.00	67847	
	13.50	39.24	67848	
	15.22	25.10	67849	
	9.45	1.20	67748	
	10.15	7.20	67749	
	12.15	39.10	67750	
	7.15	12.54	69008	
	7.30	12.20	69009	
4/10/23	7.40	33.58	70173	
	8.20	33.54	70174	
	9.00	33.56	70175	
	9.40	33.58	70176	
	10.30	33.46	70177	
	11.10	33.46	70178	
	12.00	33.50	70179	
	12.50	33.52	70180	
	13.30	33.52	70181	
	14.10	33.50	70182	
	15.00	33.56	70183	
	7.00	7.20	67850	
	9.00	33.07	69010	
	10.10	33.86	69011	
	10.20	32.99	69012	
	12.05	33.72	69013	
	12.00	17.28	69014	
	7.00	19.20	69015	
	14.00	33.07	69016	
	15.25	33.54	69017	
	7.44	4.32	10197	
	9.36	10.30	10198	
5/10/23	7.00	17.28	69018	
	7.55	33.72	69019	
	9.00	33.02	69020	
	10.00	19.20	69022	
	10.15	33.09	69023	
	11.45	33.26	69024	
	11.55	4.00	69025	
	12.00	39.22	69026	
	12.00	19.20	69027	
	13.30	39.46	69028	
	13.40	33.07	69029	
	7.00	33.54	70184	
	7.40	33.50	70185	
	8.20	33.58	70186	
	9.00	33.50	70187	
	9.40	33.48	70188	
	10.20	33.52	70189	
	11.00	33.56	70190	
	11.40	33.50	70191	
	12.20	33.52	70192	
	14.00	33.58	70193	
	9.31	5.50	9911	
	17.26	26.00	9912	
6/10/23	7.05	11.22	69030	
	7.45	32.80	69031	
	7.00	33.50	70194	
	7.40	33.54	70195	
	8.20	33.50	69251	
	9.00	33.60	69252	
	9.40	33.54	69253	
	10.20	33.52	69254	
	9.00	11.50	69801	
	9.15	33.48	69802	
	9.18	11.06	69803	
	9.30	32.69	69804	
	9.45	19.04	69805	
	11.35	11.94	69806	
	12.10	38.74	69807	
	12.30	19.38	69808	
	14.00	33.04	69809	
	15.55	39.98	71081	
	16.20	33.40	71082	
9/10/23	7.05	19.78	71083	
	7.27	30.50	71084	
	7.55	20.34	71085	
	9.00	8.00	71086	
	9.20	9.84	71087	

Date	Time	Tonne	Docket Number	Total Tonnes
		November		
1/11/23	7.15	11.24	70984	15,420.93
	7.00	17.28	70985	
	7.15	10.76	70986	
	7.15	12.28	70987	
	7.50	3.50	70988	
	8.35	11.36	70989	
	8.50	38.50	70990	
	9.00	33.02	70991	
	9.00	10.46	70992	
	9.06	11.90	70993	
	9.00	32.00	70994	
	10.10	33.12	70995	
	10.14	14.50	70996	
	10.30	12.20	70997	
	10.47	13.00	70998	
	11.20	33.08	70999	
	11.30	12.20	71000	
	7.00	33.48	70923	
	7.40	33.54	70924	
	8.20	33.54	70925	
	9.10	33.50	70926	
	10.20	33.50	70927	
	11.30	33.50	70928	
	12.40	33.50	70929	
	14.20	33.50	70930	
	15.00	33.52	70931	
	15.30	33.50	70932	
	11.00	7.20	70709	
	12.10	12.48	70710	
	12.13	12.68	70711	
	12.55	38.60	70712	
	13.30	11.48	70713	
	14.00	11.16	70714	
	14.05	11.94	70715	
	14.20	36.00	70716	
	14.40	11.42	70717	
	15.15	10.54	70718	
	15.20	12.76	70719	
	15.55	12.14	70720	
	7.39	11.00	9758	
	13.23	30.00	9759	
	14.00	25.00	9759	
2/11/23	7.00	33.50	70933	
	8.00	33.50	70934	
	10.40	33.50	70935	
	12.10	33.50	70936	
	13.40	33.50	70937	
	8.15	38.60	70721	
	9.50	33.08	70722	
	10.35	32.97	70723	
	13.10	33.12	70724	
	13.45	12.18	70725	
	14.15	32.18	70726	
	15.10	38.60	70727	
3/11/23	7.05	33.02	70664	
	7.00	24.96	70665	
	7.25	7.00	70666	
	7.30	12.48	70667	
	8.00	39.32	70668	
	8.15	32.91	70669	
	9.00	12.28	70670	
	10.05	38.50	70671	
	10.30	6.00	70672	
	10.50	12.40	70673	
	9.00	19.20	70675	
	11.20	12.16	70676	
	12.00	11.42	70677	
	12.30	33.12	70678	
	13.15	12.22	70679	
	13.30	10.98	70680	
	13.50	38.70	70681	
	14.55	12.98	70682	
	15.00	39.40	70683	
	10.43	1.00	10236	
	11.31	8.00	10237	
6/11/23	7.20	33.07	70684	
	7.00	21.60	70685	
	7.40	11.00	70686	
	8.30	13.50	70688	
	8.45	33.12	70689	
	8.45	32.10	70690	
	10.00	24.00	70691	
	9.57	10.68	70692	
	11.00	3.60	70693	
	10.48	32.50	70694	
	12.20	11.16	70695	
	12.00	20.40	70696	
	13.00	32.56	70697	
	13.05	11.10	70698	
	13.05	25.20	70699	

Date	Time	Tonne	Docket Number	Total Tonnes
		December		
1/12/23	7.03	39.56	70298	13,463.37
	7.14	39.00	70299	
	7.15	33.08	70300	
	7.00	33.58	71138	
	7.40	33.56	71139	
	7.22	18.20	10242	
	8.20	11.50	68574	
	10.25	11.50	68575	
	12.45	20.00	68576	
	12.55	39.00	68577	
	15.50	38.50	68578	
	8.20	33.52	69930	
	9.00	33.54	69931	
	9.30	33.50	69932	
	10.45	33.50	69933	
	12.00	33.50	69934	
	12.40	33.50	69935	
	13.20	33.54	69936	
	14.00	33.62	69937	
	14.40	33.54	69938	
	15.20	33.52	69939	
	11.28	11.00	9926	
4/12/23	7.15	33.01	68579	
	7.30	17.30	68580	
	7.00	25.92	68581	
	7.39	17.00	68582	
	7.00	17.28	68583	
	7.45	18.80	68584	
	8.40	32.91	68585	
	9.15	17.20	68586	
	9.20	16.80	68587	
	9.25	18.80	68588	
	10.00	19.20	68589	
	10.25	33.90	68590	
	10.55	12.00	68591	
	11.05	18.80	68592	
	11.20	17.30	68593	
	11.10	17.00	68594	
	11.30	32.72	68595	
	12.20	36.20	68596	
	12.30	19.20	68597	
	12.50	39.00	68598	
	13.00	17.00	68599	
	13.05	18.80	68600	
	7.00	33.58	69940	
	7.40	39.64	69941	
	8.20	33.54	69942	
	9.00	33.58	69943	
	9.20	32.00	69944	
	11.00	33.50	69945	
	12.15	33.50	69946	
	11.50	33.52	69947	
	12.30	33.56	69948	
	12.30	32.00	69949	
	13.10	32.00	69950	
	13.30	32.00	71201	
	14.40	32.00	71202	
	15.00	33.50	71203	
	15.40	33.56	71204	
	16.20	33.50	71205	
	16.30	33.52	71206	
	13.10	17.20	71151	
	13.15	11.60	71152	
	13.40	32.69	71153	
	14.00	25.92	71154	
	14.30	32.62	71155	
	15.10	34.00	71156	
	11.15	2.00	9927	
5/12/23	7.00	33.58	71207	
	7.40	33.58	71208	
	8.20	33.52	71209	
	9.00	33.56	71210	
	9.40	33.50	71211	
	10.50	33.50	71212	
	11.30	33.50	71213	
	11.40	33.50	71214	
	12.50	33.50	71215	
	13.00	33.50	71216	
	14.00	33.50	71217	
	14.10	33.50	71218	
	15.20	33.50	71219	
	15.30	33.54	71220	
	15.50	33.56	71221	
	16.00	33.52	71222	
	16.30	33.54	71223	
	16.40	33.60	71224	
	17.00	33.50	71225	
	17.00	33.54	71226	
	17.00	33.52	71227	
	17.00	33.54	71228	

Annual Tonnes

July	12337.6
August	17953.2
September	14844.07
October	14275.1
November	15420.93
December	13463.37
	88294.26

	9.00	32.00	63197
	10.10	33.08	63198
	10.35	32.00	63199
	11.45	33.08	63200
	9.00	33.54	67167
	11.20	33.50	67168
	14.45	33.56	67169
	12.00	38.82	67028
	12.50	38.20	67029
	13.00	33.12	67030
	14.32	17.86	67031
	15.00	6.00	67032
	15.40	39.68	67033
	11.58	1.20	10134
10/7/23	14.20	39.58	67034
	14.50	38.64	67035
	15.20	34.16	67036
	7.00	33.52	68761
	7.40	33.58	68762
	8.20	33.50	68763
	9.00	33.52	68764
	12.20	33.54	68765
	13.00	33.50	68766
	13.40	33.56	68767
	14.20	33.54	68768
	15.00	33.52	68769
	16.03	14.50	10135
11/7/23	7.00	33.50	68770
	7.40	33.54	68771
	8.20	33.52	68772
	9.00	33.50	68773
	9.30	26.00	68774
	11.30	33.50	68775
	12.10	33.54	68776
	13.00	33.56	68777
	7.20	32.12	67037
	7.30	2.40	67038
	8.00	9.60	67039
	8.30	3.00	67040
	9.30	32.50	67041
	9.45	9.00	67042
	10.00	2.40	67043
	11.05	11.66	67044
	10.30	4.80	67045
	11.20	22.86	67046
	13.10	39.10	67047
	14.45	39.86	67048
	15.25	39.58	67049
	9.59	6.72	10136
	10.26	0.90	10137
	15.05	1.44	10138
12/7/23	7.00	33.58	68778
	7.40	33.52	68779
	8.20	33.52	68780
	9.00	33.56	68781
	9.00	33.00	68782
	11.50	33.52	68783
	8.25	33.87	67050
	8.02	5.28	10139
	10.20	3.00	10140
	14.51	2.88	10141
	9.40	33.78	68895
	13.30	36.60	68896
	15.25	39.50	68897
13/7/23	9.48	3.00	10142
	12.16	1.00	10143
	7.00	33.54	68784
	7.40	33.52	68785
	8.20	33.62	68786
	9.00	33.54	68787
	9.40	33.56	68788
	10.20	33.52	68789
	11.00	33.50	68790
	11.40	33.56	68791
	12.20	33.48	68792
	15.10	33.52	68793
	10.00	38.06	68898
	10.15	39.43	68899
	10.20	33.68	68900
	11.15	33.16	68839
	14.00	38.00	68840
	15.40	38.36	68841
14/7/23	7.00	33.54	68794
	7.40	33.52	68795
	8.20	33.58	68796
	9.00	33.54	68797
	9.40	33.54	68798
	10.20	33.50	68799
	7.20	32.21	68842
	7.30	29.00	68843
	9.00	32.12	68901
	9.35	30.68	68902
	10.20	31.98	68903

	13.37	19.24	68090
	13.40	16.90	68091
	13.40	11.54	68092
	13.50	12.30	68093
	13.50	17.90	68094
	14.50	38.46	68095
	14.55	17.90	68096
	15.00	12.22	68097
	15.20	38.46	68098
	16.50	11.10	68099
	8.00	33.54	67917
	8.40	33.52	67918
	9.20	33.52	67919
	10.20	33.54	67920
	11.00	33.50	67921
	11.40	33.58	67922
	12.45	13.00	67923
	13.40	33.50	67924
	14.20	33.54	67925
	15.00	33.52	67926
	15.40	33.54	67927
	16.20	33.50	67928
	15.00	33.52	67929
	7.13	5.76	10164
	10.53	5.76	10165
	15.51	19.20	10166
3/8/23	7.20	33.50	67930
	7.30	33.54	67931
	8.20	33.48	67932
	8.30	33.56	67933
	9.00	33.50	67934
	9.10	33.60	67935
	9.40	33.54	67936
	9.50	33.58	67937
	10.20	33.54	67938
	7.10	11.00	68100
	7.00	24.00	68001
	8.00	10.50	68002
	8.25	9.50	68003
	8.30	38.52	68004
	9.00	33.12	68005
	10.20	33.17	68006
	9.15	10.34	68007
	11.00	10.82	68008
	11.01	24.00	68009
	11.10	10.00	68010
	13.45	39.34	68011
	13.50	33.12	68012
	14.30	32.00	68013
	14.00	16.20	68014
	15.25	39.26	68015
	9.27	7.00	10167
	12.13	7.00	10168
4/8/23	7.30	33.52	67939
	8.10	33.58	67940
	7.15	11.66	68016
	7.20	33.08	68017
	7.45	16.75	68018
	8.10	17.30	68019
	8.15	17.58	68020
	8.20	19.26	68021
	8.30	19.64	68022
	8.10	3.00	68023
	8.30	33.07	67451
	8.40	37.34	67452
	9.30	11.66	67453
	9.30	11.88	67454
	9.45	17.12	67455
	10.30	16.68	67456
	10.30	19.58	67457
	10.30	19.36	67458
	10.40	12.00	67459
	8.50	33.54	67195
	9.30	33.50	67196
	10.20	33.50	67197
	11.00	33.50	67198
	11.00	17.48	68151
	13.45	32.72	68152
7/8/23	7.40	17.70	67941
	8.00	19.00	67942
	9.40	37.80	67943
	10.15	18.75	67944
	10.30	18.50	67945
	10.40	18.74	67946
	13.55	36.58	67947
	14.25	34.00	68101
	14.50	39.32	68102
	16.15	38.90	68103
	7.50	25.35	68104
	7.30	18.66	68105
	7.00	33.70	68106
	7.35	33.60	68107
	8.05	33.65	68108

	12.02	20.00	9907
6/9/23	7.00	17.42	68376
	7.15	17.84	68377
	7.20	32.22	68378
	7.25	17.20	68379
	7.30	12.62	68380
	7.00	17.28	68381
	7.45	26.00	68382
	9.22	8.90	68383
	9.30	3.00	68384
	9.30	16.92	68385
	9.35	34.00	68386
	9.45	19.00	68387
	10.00	19.20	68388
	10.30	16.95	68389
	10.30	17.92	68390
	10.30	11.68	68391
	11.00	19.59	68392
	11.15	33.11	68393
	11.45	17.06	68394
	12.10	33.07	68395
	12.30	19.20	68397
	12.33	18.46	68398
	12.00	19.20	68399
	13.00	17.15	68400
	7.00	19.00	67597
	7.36	18.07	67598
	7.37	17.80	67599
	13.35	32.00	67600
	7.00	33.52	68345
	7.40	33.52	68346
	8.20	33.56	68347
	9.00	33.58	68348
	9.40	33.54	68349
	10.20	33.50	68350
	11.00	33.54	67801
	11.40	33.52	67802
	12.20	33.60	67803
	13.00	33.54	67804
	14.00	19.56	67755
	15.15	38.06	67756
	15.25	38.28	67757
	15.30	17.72	67758
	10.50	8.00	9876
	12.48	31.24	9877
	13.46	15.00	9878
	14.00	15.00	9878
	14.30	15.00	9878
7/9/23	7.00	33.64	67805
	7.40	33.56	67806
	8.20	33.50	67807
	9.00	33.54	67808
	9.40	33.52	67809
	10.20	33.64	67810
	11.00	33.56	67811
	11.40	33.50	67812
	12.20	33.50	67813
	13.00	33.54	67814
	13.40	33.54	67815
	14.20	33.52	67816
	15.00	33.54	67817
	15.40	33.50	67818
	7.50	34.00	67759
	7.21	17.92	67760
	9.20	33.72	67761
	9.31	17.96	67762
	10.51	11.80	67763
	12.45	18.00	67764
	7.00	19.32	67708
	7.00	17.04	67709
	7.00	18.00	67710
	7.15	17.00	67711
	7.15	19.50	67712
	7.00	17.28	67713
	8.40	12.40	67714
	9.45	17.80	67715
	9.55	17.18	67716
	10.00	17.00	67717
	10.15	24.40	67718
	10.15	19.10	67719
	12.40	17.00	67720
	13.00	19.10	67721
	13.07	17.70	67722
	13.15	33.66	67723
	13.20	16.90	67724
	13.23	18.70	67725
	13.45	33.08	67726
	14.25	37.98	67727
	14.35	16.00	9908
	14.45	30.00	9909
	14.39	12.00	9910
	15.45	18.00	71051
	16.00	12.24	69301

	9.50	19.58	71088
	10.00	11.04	71089
	10.00	37.40	71090
	10.25	30.10	71091
	10.40	33.78	71092
	10.50	10.60	71093
	11.00	20.46	71094
	11.25	33.08	71001
	11.30	11.10	71002
	12.45	19.60	71004
	12.51	18.26	71005
	13.20	39.16	71006
	13.30	30.20	71007
	14.10	20.36	71008
	14.54	19.28	71009
	15.50	39.52	71010
	7.00	33.58	69051
	7.40	33.46	69052
	8.20	33.56	69053
	9.00	33.50	69054
	9.40	33.52	69055
	10.20	33.50	69056
10/10/23	7.00	33.52	69057
	7.40	33.50	69058
	8.20	33.52	69059
	9.00	33.56	69060
	9.40	33.54	69061
	10.20	33.50	69062
	11.00	33.54	69063
	11.40	33.52	69064
	12.20	33.53	69065
	13.00	33.50	69066
	7.45	19.56	71011
	10.00	31.30	71012
	10.30	19.15	71013
	10.55	20.50	71014
	11.00	31.68	71015
	11.05	19.64	71016
	11.02	35.80	71017
	11.30	19.20	71018
	10.00	23.40	71019
	12.00	24.00	71019
	13.20	19.20	71020
	13.35	20.50	71021
	13.45	6.75	71022
	13.52	19.44	71023
	14.00	17.28	71024
	14.55	6.04	71025
	15.00	1.43	71026
	7.00	19.30	71095
	7.15	17.89	71096
	7.20	32.62	71097
	7.34	17.28	71098
	7.55	20.50	71099
	8.35	32.62	71100
11/10/23	7.00	33.50	69067
	7.40	33.56	69068
	8.20	33.58	69069
	9.00	33.50	69070
	9.40	33.52	69071
	10.20	33.56	69072
	11.00	33.50	69073
	11.40	33.48	69074
	11.40	33.56	69075
	12.20	33.46	69076
	13.00	33.62	69077
	7.15	17.18	71027
	7.28	18.30	71028
	7.30	17.28	71029
	7.52	18.00	71030
	7.58	30.50	71031
	9.00	11.44	71032
	10.00	19.20	71033
	11.00	30.40	71034
	13.30	30.50	71035
	14.55	11.00	71036
	11.30	18.00	69201
	11.30	17.40	69203
	11.40	9.50	69204
	13.10	33.03	69205
	13.20	19.56	69206
	13.40	18.50	69207
	14.30	37.66	69208
	14.40	17.00	69209
	15.00	40.00	69210
12/10/23	7.00	33.54	69078
	7.40	33.54	69079
	8.20	33.48	69080
	9.00	33.50	69081
	9.40	33.52	69082
	10.20	33.58	69083
	11.00	33.54	69084
	11.40	33.60	69085

	14.09	11.10	70700
	7.00	33.58	69883
	7.40	33.54	69884
	8.20	33.50	69885
	9.00	33.54	69886
	9.40	33.50	69887
	10.50	33.50	69888
	12.00	33.50	69889
	13.20	33.56	69890
	14.00	33.50	69891
	14.40	33.52	69892
	15.20	33.52	69893
	14.45	33.58	69268
	14.06	0.43	10238
7/11/23	7.00	33.54	69894
	7.40	33.50	69895
	8.20	33.52	69896
	9.00	33.50	69897
	11.20	33.50	69898
	12.00	33.50	69899
	12.40	33.64	69900
	7.10	11.48	69269
	7.22	11.66	69270
	7.25	10.44	69272
	8.30	12.32	69273
	8.40	11.98	69274
	8.50	10.44	69275
	10.10	12.12	69276
	10.10	12.30	69277
	10.20	10.44	69278
	11.10	12.86	69279
	11.15	11.98	69280
	11.40	8.00	69281
	12.05	10.44	69282
	12.00	32.00	69283
	12.10	11.88	69284
	12.20	11.56	69285
	14.00	13.26	69286
	14.00	11.88	69287
	14.05	10.44	69288
	13.20	33.56	70851
	7.39	2.40	10239
8/11/23	7.00	10.15	69289
	8.00	7.20	69290
	8.30	10.75	69291
	9.30	33.01	69292
	9.30	7.20	69293
	10.15	39.00	69294
	10.00	11.15	69295
	11.00	7.20	69296
	12.00	32.50	69297
	11.30	11.15	69298
	13.25	33.22	69299
	14.30	10.43	69300
	7.00	33.60	70853
	7.40	33.58	70854
	8.20	33.60	70855
	9.00	33.54	70856
	9.40	33.50	70857
	10.20	33.56	70858
	11.00	33.52	70859
	11.40	33.48	70860
	12.20	33.54	70861
	10.35	38.90	69289
	13.45	12.94	69825
	14.25	39.10	69826
	12.21	4.28	10240
9/11/23	7.00	33.58	70862
	7.40	33.56	70863
	8.20	33.50	70864
	9.00	33.52	70865
	9.40	33.54	70866
	10.20	33.56	70867
	11.00	33.50	70868
	7.00	17.28	69828
	7.30	12.32	69829
	7.40	17.86	69831
	7.40	19.04	69832
	8.50	12.36	69833
	10.00	19.22	69834
	9.50	33.07	69835
	10.00	18.72	69836
	10.00	6.00	69837
	10.30	12.96	69838
	11.42	13.26	69839
	12.00	37.96	69840
	12.15	12.10	69842
	12.55	12.18	69843
	13.13	6.50	69844
	13.30	12.20	69845
	13.45	20.10	69846
	14.00	33.17	69847
	14.13	12.90	69848

	7.00	13.02	71157
	7.50	31.15	71158
	8.00	32.60	71159
	9.00	11.48	71160
	9.10	38.50	71161
	9.20	31.51	71162
	9.47	5.00	71163
	10.40	12.26	71164
	11.05	31.27	71165
	12.35	32.75	71166
	13.00	12.48	71167
	13.15	32.66	71168
	13.40	32.00	71169
	14.34	36.00	71170
	14.40	17.90	71171
	15.10	31.62	71172
	7.12	8.40	9928
	9.44	11.00	9929
	10.48	14.70	9930
6/12/23	7.00	33.52	71229
	7.10	33.50	71230
	7.40	33.56	71231
	7.50	33.50	71232
	8.20	33.56	71233
	8.30	33.54	71234
	9.00	33.50	71235
	9.10	33.50	71236
	10.10	33.50	71237
	10.20	33.50	71238
	10.50	33.50	71239
	11.00	33.50	71240
	12.40	33.50	71241
	12.50	33.50	71242
	14.00	33.50	71243
	14.40	33.50	71244
	15.30	33.52	71245
	16.00	33.52	71246
	16.10	33.54	71247
	16.50	33.50	71248
	17.00	33.50	71249
	7.00	13.22	71173
	7.05	38.30	71174
	7.30	39.06	71175
	7.00	17.28	71176
	7.00	25.92	71177
	8.45	12.64	71178
	8.45	38.00	71179
	10.00	19.20	71180
	11.00	12.28	71181
	11.06	12.20	71182
	11.50	32.00	71183
	12.45	37.00	71184
	12.45	19.20	71185
	13.20	12.16	71186
	14.10	38.00	71187
	14.35	38.36	71188
	15.30	38.98	71189
	11.58	1.50	9931
	14.36	2.00	9932
7/12/23	7.00	12.80	71190
	7.45	39.60	71191
	7.00	17.28	71192
	8.00	33.17	71193
	8.25	12.88	71194
	9.15	11.60	71195
	9.20	33.13	71196
	10.00	12.06	71197
	10.00	19.20	71198
	10.45	39.26	71199
	11.30	31.30	71200
	7.00	33.54	71250
	11.25	12.22	70301
	11.50	38.72	70302
	13.00	12.40	70303
	13.20	8.00	70304
	13.00	19.20	70305
	14.20	32.69	70306
	15.45	30.40	70307
	8.40	34.00	70351
	9.50	33.70	70352
	10.50	33.60	70353
	12.00	33.50	70354
	13.20	33.50	70355
	14.45	33.50	70356
	17.20	13.00	9933
	17.23	12.00	9934
8/12/23	7.00	12.36	70308
	7.00	12.00	70309
	7.15	12.36	70310
	7.35	12.00	70311
	8.30	12.01	70312
	8.45	12.00	70313
	9.00	33.14	70314

	11.45	29.24	68904
	13.15	32.12	68905
	13.20	32.92	68906
	13.45	32.50	68907
	14.30	32.14	68908
	14.50	33.76	68909
	16.00	33.60	68910
	12.30	33.54	68951
	13.20	33.58	68952
	14.00	33.52	68953
	14.40	33.52	68954
	15.20	33.50	68955
	16.00	33.36	68956
17/7/23	7.00	33.52	68957
	7.40	33.54	68958
	8.20	33.50	68959
	9.00	33.54	68960
	9.40	33.56	68961
	10.20	33.52	68962
	11.00	33.50	68963
	11.40	33.52	68964
	12.20	33.52	68965
	12.30	33.50	68966
	13.20	33.48	68967
	8.15	21.60	68911
	11.25	12.52	68912
	12.15	11.94	68913
	12.15	24.00	68914
	13.18	3.40	68915
	15.30	39.62	68916
	14.45	38.86	68917
	15.05	33.38	68918
18/7/23	7.30	32.26	68919
	8.20	1.70	68920
	11.10	4.50	68921
	12.40	6.20	68922
	12.52	2.37	68923
	13.50	33.38	68924
	14.00	32.00	68925
	14.10	39.86	68926
	7.00	33.56	68968
	7.40	33.50	68969
	8.20	33.54	68970
	9.00	33.58	68971
	9.40	33.56	68972
	10.20	33.52	68973
	11.00	33.62	68974
	11.40	33.54	68975
	12.20	33.54	68976
	13.00	33.50	68977
	14.15	33.50	68978
	15.30	33.54	68979
	9.38	0.22	10151
	16.00	12.58	10152
19/7/23	11.19	4.00	10153
	15.53	13.64	10154
	7.00	33.52	68980
	7.40	33.58	68981
	8.20	33.50	68982
	9.00	33.50	68983
	9.40	33.48	68984
	10.20	33.56	68985
	11.00	33.50	68986
	12.20	33.54	68987
	13.40	33.52	68988
	7.30	32.24	68927
	8.16	0.86	68928
	9.00	18.24	68929
	10.10	10.00	68930
	13.00	3.58	68931
	14.35	37.36	68932
20/7/23	7.00	33.56	68989
	7.10	33.50	68990
	8.30	33.54	68991
	9.00	33.52	68992
	9.20	33.54	68993
	9.50	33.52	68994
	10.00	33.50	68995
	11.10	33.50	68996
	11.50	33.58	68997
	12.30	33.60	68998
	13.00	33.50	68999
	13.40	33.58	69000
	7.00	7.00	68934
	7.45	39.42	68935
	10.00	38.00	68936
	11.15	38.94	68937
	12.45	39.40	68938
	15.06	37.28	68939
	13.20	39.60	68940
	13.30	12.00	68941
	13.33	6.76	68942
	14.15	37.30	68943

	8.45	33.70	68109
	10.10	33.70	68110
	10.45	33.60	68111
	11.20	33.75	68112
	13.00	33.75	68113
	14.15	33.65	68114
	14.50	33.55	68115
	15.30	33.75	68116
	10.46	3.60	9867
	7.29	12.74	9868
	10.47	4.80	9869
8/8/23	7.30	32.62	68024
	8.40	33.08	68025
	11.30	6.00	68026
	12.10	33.52	68027
	13.00	12.64	68028
	13.54	34.06	68029
	14.00	33.07	68030
	8.20	32.72	67948
	9.03	5.62	67949
	10.30	12.28	67950
	7.05	33.75	68117
	7.30	33.60	68118
	8.00	33.65	68119
	8.35	33.55	68120
	9.15	33.65	68121
	9.45	33.70	68122
	10.20	33.70	68123
	10.50	33.60	68124
	12.30	33.70	68125
	13.06	33.55	68126
	14.40	33.80	68127
	12.33	5.00	9850
9/8/23	7.33	7.10	9871
	7.00	6.00	68031
	7.00	37.70	68032
	7.30	38.76	68033
	10.15	3.28	68034
	11.00	38.50	68035
	11.15	39.85	68036
	11.00	39.10	68037
	11.29	3.62	68038
	12.30	30.30	68039
	12.35	3.48	68040
	12.45	38.42	68041
	13.55	3.66	68042
	14.00	38.10	68043
	14.40	38.50	68044
	14.44	42.50	68045
	15.00	39.20	68046
	15.20	38.92	68047
	15.22	18.02	68048
	15.15	33.60	68128
	7.05	33.60	68129
	8.20	33.70	68130
	9.00	33.60	68131
	9.35	33.70	68132
	10.15	33.80	68133
	10.45	33.80	68134
	12.30	33.90	68135
	13.05	33.75	68136
	14.30	33.70	68137
	15.00	33.80	68138
10/8/23	7.00	33.70	68139
	7.40	33.65	68140
	8.15	33.60	68141
	8.50	33.80	68142
	9.20	33.80	68143
	9.50	33.75	68144
	10.25	33.60	68145
	11.00	33.70	68146
	12.30	33.80	68147
	14.00	33.60	68148
	15.15	33.65	68149
	15.50	33.75	68150
	7.10	39.10	68049
	7.37	42.42	68050
	7.10	38.50	67460
	8.50	38.52	67461
	13.43	8.64	10202
	10.10	33.17	67199
	10.30	38.84	67200
	9.00	32.72	67366
	11.05	2.22	67367
	11.30	33.08	67368
	12.55	39.18	67369
	13.40	33.07	67370
	14.00	39.02	67371
	14.35	39.20	67372
11/8/23	8.46	23.04	10203
	11.30	33.15	67416
	7.00	33.70	68153
	7.35	33.70	68154

8/9/23	7.00	33.46	67819
	7.40	33.56	67820
	7.15	17.82	71052
	7.15	19.20	71053
	7.48	14.22	71054
	8.20	18.00	71056
	9.25	10.50	71057
	9.45	39.24	71058
	10.00	20.00	71059
	10.05	19.30	71060
	11.10	38.98	71061
	13.20	33.46	71062
	13.50	33.01	71063
	7.00	18.62	69302
	7.00	16.91	69303
	9.00	32.70	69304
	9.20	32.50	69305
	9.45	17.78	69306
	10.05	17.00	69307
	10.22	18.92	69308
	12.10	6.00	69309
	8.20	33.52	69351
	9.00	33.60	69352
	9.40	33.52	69353
	10.20	33.48	69354
	11.00	33.50	69355
	11.40	33.54	69356
	12.20	33.50	69357
	13.00	33.54	69358
	13.40	33.54	69359
	14.30	33.58	69360
	8.20	1.00	10226
	11.21	1.80	10227
9/9/23	8.00	14.40	68215
	9.10	14.70	68216
	10.30	14.18	68217
11/9/23	7.01	17.88	68218
	7.15	20.50	68219
	7.30	19.36	68220
	7.40	8.00	68221
	8.05	32.72	68222
	9.00	4.00	68223
	9.15	11.00	68224
	9.40	17.90	68225
	10.18	20.40	68226
	10.30	13.78	68227
	11.55	18.39	68228
	11.50	16.96	68229
	11.57	17.88	68230
	12.45	32.62	68231
	12.55	20.50	68232
	13.50	22.42	68233
	14.00	19.00	68234
	14.00	32.69	68235
	14.15	14.80	68236
	14.33	17.86	68237
	15.00	17.78	68238
	15.39	34.76	68239
	15.50	39.50	68240
	7.00	33.54	69151
	7.40	33.50	69152
	8.20	33.51	69153
	9.00	33.58	69154
	9.40	33.56	69155
	10.20	33.50	69156
	14.00	33.52	69167
	14.40	33.56	69158
	13.48	7.68	10228
12/9/23	7.50	32.77	68241
	7.55	17.80	68242
	9.00	33.07	68243
	10.22	19.56	68244
	12.20	17.96	68245
	12.30	13.50	68246
	12.31	17.96	68247
	7.00	33.54	69159
	7.10	33.54	69160
	7.40	33.50	69161
	7.50	33.58	69162
	8.20	33.62	69163
	8.30	33.50	69164
	9.00	33.52	69165
	9.10	33.50	69166
	13.20	33.56	69167
	13.30	33.52	69168
	7.25	19.84	69361
	7.32	19.48	69362
	7.40	38.16	69363
	7.45	19.10	69364
	7.50	11.50	69365
	10.15	19.86	69366
	10.30	19.30	69367
	13.00	19.60	69368

	12.20	33.50	69086
	13.00	33.56	69087
	13.40	33.50	69088
	14.20	33.52	69089
	7.40	32.76	71037
	15.00	11.74	71038
	7.00	39.30	69211
	7.20	17.28	69212
	9.10	33.20	69213
	10.30	33.07	69214
	11.45	32.60	69215
	11.50	31.62	69216
	11.00	11.12	69217
	11.00	19.20	69218
	13.00	19.20	69219
	13.40	33.08	69220
	14.54	31.80	69221
	15.00	12.10	69222
	15.40	38.38	69223
13/10/23	10.10	17.00	71039
	10.45	12.28	71040
	11.30	19.20	71041
	15.00	11.70	71042
	15.55	32.22	71043
	7.00	30.40	69224
	7.00	19.20	69225
	7.10	17.00	69226
	7.15	11.84	69227
	7.46	17.28	69228
	8.50	12.20	69229
	9.20	33.07	69230
	9.30	31.32	69231
	9.40	30.20	69232
	9.50	14.50	69233
	10.05	19.10	69234
	11.00	32.00	69235
	11.20	16.26	69236
	12.00	11.88	69237
	12.40	17.30	69239
	12.45	30.40	69240
	12.50	16.00	69241
	13.00	31.80	69243
	13.05	19.35	69244
	13.35	19.60	69245
	13.40	12.34	69246
	13.40	17.28	69247
	14.15	16.00	69248
14/10/23	12.00	32.50	71044
16/10/23	8.22	3.84	10235
	9.44	2.48	9898
	7.00	17.28	69249
	7.25	19.43	69250
	7.05	17.40	71045
	7.10	17.22	71046
	7.32	19.56	71047
	7.25	17.20	71048
	8.00	32.64	71049
	8.00	5.00	71050
	10.00	19.20	70196
	12.45	19.20	70197
	10.20	14.91	69255
	10.35	17.84	69256
	10.30	19.03	69257
	10.40	32.76	69258
	10.45	19.60	69259
	10.50	17.02	69260
	10.55	17.22	69261
	12.50	17.40	69262
	12.55	16.96	69263
	13.25	18.01	69264
	14.00	11.75	69265
	15.13	12.12	69266
	15.30	11.80	69267
	8.15	16.74	69810
	8.15	17.00	69811
	8.35	33.18	69812
	9.00	17.72	69813
	9.10	17.10	69814
	9.15	17.06	69815
	9.15	33.01	69816
	11.00	12.44	69817
	11.45	33.18	69818
	11.55	17.00	69819
	12.10	11.64	69820
	13.00	33.25	69821
	14.15	16.78	69822
	15.25	32.30	69823
	7.00	33.56	69090
	7.40	33.63	69091
	8.20	33.54	69092
	9.00	33.58	96093
	9.40	33.50	69094
	10.20	33.54	69095

	14.40	11.90	69849
	15.15	11.96	69850
10/11/23	7.00	33.56	70869
	7.40	33.52	70870
	8.20	33.48	70871
	8.15	11.00	70728
	8.30	39.58	70729
	9.40	33.58	69901
	10.20	33.52	69902
	9.40	11.84	70938
	10.10	39.54	70939
	11.15	12.98	70940
	13.20	33.08	70941
	13.50	33.55	70942
	15.10	33.55	70943
	13.15	0.60	11251
11/11/23	8.00	39.58	70731
	10.29	6.00	70732
13/11/23	7.15	32.97	70733
	8.55	30.74	70734
	9.00	33.06	70735
	10.31	32.73	70736
	16.10	39.68	70737
	7.00	33.54	69951
	7.40	33.56	69952
	8.20	33.60	69953
	9.00	33.58	69954
	9.40	33.50	69955
	10.50	33.50	69956
	12.20	33.50	69957
	13.00	33.54	69958
	14.00	33.50	69959
	14.40	33.56	69960
	15.20	33.56	69961
	16.05	2.64	11252
14/11/23	7.00	33.55	70738
	7.00	17.28	70739
	8.50	33.55	70740
	9.30	32.50	70741
	9.40	34.05	70742
	10.00	19.20	70743
	11.50	34.05	70744
	13.40	33.02	70745
	14.00	19.20	70746
	16.15	31.37	70747
	7.00	33.48	69962
	7.40	33.58	69963
	8.20	33.50	69964
	9.00	33.64	69965
	9.40	33.56	69966
	10.20	33.50	69967
	11.00	33.54	69968
	11.40	33.58	69969
	12.20	33.52	69970
	7.05	12.50	70872
	8.50	12.00	70873
	10.45	12.50	70874
	12.30	11.50	70875
	14.15	12.80	70876
	14.25	12.50	70877
	15.15	13.04	70878
15/11/23	7.10	18.94	70748
	7.20	20.60	70749
	7.00	17.28	70750
	7.00	33.54	69971
	7.40	33.50	69972
	8.20	33.60	69973
	9.00	33.54	69974
	9.40	33.58	69975
	10.50	33.50	69976
	11.33	33.56	69977
	12.20	33.50	69978
	13.00	33.52	69979
	13.40	33.54	69980
	15.11	8.00	70944
	7.26	19.56	70879
	8.53	32.78	70880
	8.05	12.82	70881
	8.40	3.44	70882
	9.10	19.00	70883
	9.15	18.10	70884
	9.20	19.60	70885
	9.30	12.64	70886
	10.15	12.70	70887
	10.30	33.07	70888
	10.30	19.20	70889
	10.50	19.00	70890
	11.00	20.08	70891
	11.20	19.44	70892
	11.30	12.00	70893
	11.40	39.30	70894
	12.00	32.67	70895
	12.23	8.00	70896

	10.00	11.70	70315
	10.06	11.72	70316
	9.35	12.20	70318
	10.40	12.14	70319
	11.23	12.04	70320
	11.30	12.40	70321
	12.00	12.24	70322
	12.30	6.20	70323
	12.30	11.72	70324
	12.40	30.40	70325
	12.30	19.20	70326
	9.00	17.28	70327
	12.55	12.34	70328
	7.00	32.00	70357
	8.00	32.00	70358
	7.00	33.56	71262
	7.40	33.50	71263
	8.20	33.58	71264
	9.00	33.46	71265
	9.10	33.50	71266
	10.15	33.50	71267
	11.20	33.54	71268
	12.10	33.56	71269
	12.40	33.50	71270
7/12/23	7.40	33.58	71251
Missed book	8.20	33.50	71252
	9.10	33.56	71253
	9.50	33.52	71254
	12.00	33.50	71255
	13.30	33.50	71256
	14.40	33.50	71257
	15.20	33.54	71258
	15.50	33.50	71259
	16.00	33.58	71260
	16.40	33.54	71261
8/12/23	13.40	12.42	71140
Cont.	3.42	12.30	71141
	13.55	11.40	71142
	14.35	12.20	71143
	14.53	12.06	71144
	8.36	2.00	11266
11/12/23	7.00	12.00	71145
	7.06	12.20	71146
	7.00	12.20	71147
	7.00	12.00	71148
	7.20	11.00	71149
	7.35	11.20	71150
	8.30	11.55	70401
	8.43	11.70	70402
	9.05	22.00	70403
	8.50	12.00	70404
	9.39	11.00	70405
	9.40	32.40	70406
	9.40	11.55	70407
	9.57	11.70	70408
	10.02	12.00	70409
	10.10	15.00	70410
	10.10	28.00	70411
	10.35	6.00	70412
	10.55	11.00	70413
	11.05	11.70	70414
	11.10	12.00	70415
	11.10	11.90	70416
	11.20	30.00	70417
	11.40	11.55	70418
	11.40	28.00	70419
	11.40	5.86	70420
	12.10	11.20	70421
	12.20	11.00	70422
	12.31	30.00	70423
	12.45	25.20	70424
	12.30	28.00	70425
	13.02	10.68	70426
	13.00	11.49	70427
	13.20	10.98	70428
	13.30	30.00	70429
	13.35	11.20	70430
	13.50	11.00	70431
	14.00	28.80	70432
	14.12	12.18	70433
	14.15	11.99	70434
	14.20	28.00	70435
	14.31	11.70	70436
	14.40	30.00	70437
	14.40	11.00	70438
	14.05	32.76	70439
	14.20	25.92	70440
	15.15	11.00	70441
	15.40	28.00	70442
	15.50	12.00	70444
	15.50	11.11	70445
	16.15	37.26	70446
	16.10	25.26	70447

	15.00	14.40	68944
	15.45	38.50	68945
	16.15	36.58	68946
	13.20	14.08	68844
21/7/23	11.32	6.00	9901
	7.51	10.00	9902
	11.29	8.00	9903
	8.36	8.00	9904
	11.32	6.00	9905
	8.00	21.60	67170
	8.10	6.00	67171
	8.30	15.00	67172
	9.57	14.60	67173
	10.10	6.00	67174
	10.40	15.00	67175
	11.30	14.96	67176
	11.15	24.00	67177
	12.25	2.17	67178
	12.25	15.00	67179
	13.01	14.96	67180
	13.45	37.20	67181
	13.50	15.00	67182
	8.20	33.50	67201
	8.30	33.56	67202
	9.00	33.52	67203
	9.10	33.52	67204
	9.40	33.56	67205
	9.50	33.52	67206
	12.10	33.50	67207
	15.20	33.48	67301
22/7/23	7.50	39.60	67302
24/7/23	9.00	12.10	67303
	7.00	33.52	67251
	7.40	33.52	67252
	8.20	33.56	67253
	9.00	33.50	67254
	9.40	33.54	67255
	10.20	33.52	67256
	10.05	4.00	67304
	10.30	12.46	67305
	13.10	3.94	67306
	13.35	33.46	67307
	14.00	37.90	67308
	16.10	39.60	67309
25/7/23	9.20	32.62	67310
	8.30	32.14	67311
	9.20	33.60	67312
	9.50	32.62	67313
	10.50	12.10	67314
	10.50	20.10	37315
	11.50	32.22	67316
	14.05	39.86	67317
	14.20	34.00	67318
	7.00	33.58	67257
	7.40	33.54	67258
	8.20	33.54	67259
	9.00	33.52	67260
	9.40	33.60	67261
	10.20	33.54	67262
	11.00	33.58	67263
	11.40	33.52	67264
	12.20	33.50	67265
	13.00	33.52	67266
	13.40	33.50	67267
	12.52	4.60	10155
	14.51	24.00	10156
26/7/23	7.15	36.54	67319
	7.30	32.22	67320
	8.10	32.12	67321
	9.30	33.70	67322
	10.20	32.10	67323
	10.15	37.40	67324
	11.00	20.54	67325
	11.40	32.26	67326
	11.40	16.00	67327
	12.40	32.72	67328
	13.17	3.78	67330
	14.00	11.84	67331
	7.00	33.50	67268
	7.40	33.56	67269
	8.20	33.54	67270
	9.00	33.58	67271
	9.40	33.50	67272
	10.20	33.52	67273
	11.00	33.46	67274
	13.30	33.56	67275
	14.40	33.62	67276
	15.50	33.54	67277
	16.20	33.50	67278
	17.00	33.50	67279
	11.09	6.00	10157
	11.50	6.00	10158
	15.16	7.20	10159
	8.05	33.60	68155
	8.45	33.60	68156
	9.20	33.80	68157
	9.50	33.75	68158
	10.25	33.70	68159
	11.00	33.75	68160
	11.30	33.65	68161
	12.00	5.12	68162
	13.10	4.88	67217
	15.25	33.94	67218
	13.00	33.70	67967
	13.30	33.80	67968
12/8/23	9.34	1.88	67219
	8.24	1.20	10169
14/8/23	8.50	12.50	67462
	7.40	33.50	67373
	8.20	33.56	67374
	9.00	33.54	67375
	9.40	33.54	67376
	10.20	33.52	67377
	11.00	33.50	67378
	11.40	33.58	67379
	12.20	33.50	67380
	13.00	33.52	67381
	7.20	33.18	67220
	8.35	33.22	67221
	13.30	33.52	67222
	13.40	33.07	67223
	14.50	8.00	67224
	7.00	33.52	67969
	7.42	2.88	10170
	10.53	1.90	10172
	10.57	10.80	10173
	11.07	12.00	10174
15/8/23	8.00	39.54	67463
	9.20	33.52	67464
	9.40	39.36	67465
	9.45	38.11	67466
	9.45	6.00	67467
	10.50	8.00	67468
	7.00	14.96	67225
	7.36	18.10	67226
	7.45	15.36	67227
	9.14	17.62	67228
	10.15	33.12	67229
	11.15	11.00	67230
	11.50	33.06	67231
	13.45	33.08	67232
	7.00	33.58	67382
	7.10	33.64	67383
	7.40	33.52	67384
	7.50	33.56	67385
	8.20	33.50	67386
	8.30	33.52	67387
	9.00	33.54	67388
	9.10	33.50	67389
	9.40	33.52	67390
	10.20	33.58	67391
	9.40	13.00	67392
	11.00	33.54	67393
	10.30	13.00	67394
	11.00	13.00	67395
	11.40	33.52	67396
	8.39	0.50	10175
	13.46	0.50	10176
16/8/23	7.00	33.50	67397
	11.35	13.00	67398
	7.40	33.54	67399
	8.20	33.50	67400
	9.10	33.08	67233
	10.00	6.00	67234
	13.50	17.30	67235
	14.15	32.90	67236
	15.00	2.00	67237
	16.50	13.44	67238
	8.30	37.30	67239
	11.30	5.00	67470
	13.35	34.00	67471
	14.20	8.00	67472
	14.45	32.70	67473
	14.50	33.50	67474
	16.20	34.07	67475
	7.00	33.56	67417
	9.40	33.54	67418
	10.20	33.54	67419
	11.00	33.58	67420
	11.40	33.56	67421
	12.20	33.56	67422
	13.00	33.50	67423
17/8/23	11.50	33.18	67239
	7.30	2.00	67476
	8.40	4.00	67477
	10.03	12.56	67478
	13.05	19.64	69369
	13.05	39.64	69370
	13.15	19.25	69371
	9.26	28.80	10229
	11.34	4.80	10230
13/9/23	13.10	24.00	10231
	7.00	33.52	69169
	7.40	33.52	69170
	8.20	33.58	69171
	9.00	33.54	69172
	9.40	33.60	69173
	13.00	33.58	69175
	14.00	33.50	69176
	15.10	33.52	69177
	16.00	33.56	69178
	16.40	33.54	69179
	9.10	3.60	71064
	10.45	38.84	71065
	12.05	38.58	71066
	14.55	12.04	71067
	15.50	39.32	71068
14/9/23	7.00	33.58	69180
	7.40	33.50	69181
	8.20	33.48	69182
	9.00	33.54	69183
	9.40	33.50	69184
	10.20	33.58	69185
	11.00	33.54	69186
	11.40	33.52	69187
	12.20	33.52	69188
	13.00	33.50	69189
	13.40	33.52	69190
	14.20	33.56	69191
	7.00	15.60	71069
	7.30	32.69	71070
	7.30	11.84	71071
	8.40	33.07	71072
	9.00	37.46	71073
	9.45	13.44	71074
	13.05	36.90	71075
	13.30	6.00	71076
	14.35	36.92	71077
15/9/23	7.00	33.52	69192
	7.10	33.58	69193
	7.40	33.50	69194
	7.50	33.50	69195
	8.20	33.54	69196
	8.30	33.56	69197
	10.00	12.96	9879
	10.37	5.00	9880
	10.00	36.90	69310
	10.20	33.07	69311
	11.35	37.26	69312
	13.30	12.90	69313
	14.30	13.20	69313
	15.00	13.20	69313
18/9/23	8.33	6.00	9881
	9.01	4.50	9882
	9.46	6.00	9883
	10.24	6.00	9884
	13.54	6.00	9885
	15.28	12.00	9886
	7.20	17.28	69314
	7.20	33.07	69315
	8.00	31.00	69316
	8.15	4.00	69317
	7.15	12.18	69318
	8.50	37.40	69319
	9.00	33.11	69320
	9.00	13.44	69321
	10.00	24.00	69322
	10.05	11.00	69323
	10.15	32.91	69324
	10.13	9.00	69325
	10.20	11.38	69326
	13.50	33.07	69327
	14.05	36.14	69328
	7.00	33.56	70201
	7.40	33.52	70202
	8.20	33.62	70203
	9.00	33.54	70204
	9.40	33.54	70205
	10.20	33.58	70206
	11.00	33.56	70207
	11.40	33.54	70208
	10.39	36.30	70151
19/9/23	7.05	38.66	69329
	7.25	17.28	69330
	7.00	19.20	69331
	8.50	19.36	69332
	8.59	20.53	69333
	9.00	36.68	69334
	10.00	19.20	69335
	11.00	33.54	69096
	11.40	33.50	69097
	12.20	33.52	69098
17/10/23	7.29	3.00	9899
	7.05	17.10	70198
	7.15	18.20	70199
	7.23	17.34	70200
	7.00	33.48	69099
	7.40	33.56	69100
	8.20	33.52	69851
	9.00	33.56	69852
	9.40	33.50	69853
	10.20	33.54	69854
	11.00	33.50	69855
	11.40	33.50	69856
	12.20	33.54	69857
	13.00	33.50	69858
	10.30	19.20	69101
	10.35	17.46	69102
	10.10	17.00	69103
	10.52	17.32	69104
	11.00	17.30	69105
	11.14	6.28	69106
	11.20	19.20	69107
	12.05	16.74	69108
	1.10	17.00	69109
	12.25	17.06	69110
	12.30	17.40	69111
	12.40	38.96	69112
	11.25	19.16	69113
	13.30	21.60	69114
	13.55	16.92	69115
	14.00	17.10	69116
	14.20	39.24	69117
	14.30	33.07	69118
	7.15	11.60	69032
	7.40	17.28	69033
	7.50	16.90	69034
	8.00	33.70	69035
	8.30	12.34	69036
	8.50	33.04	69037
	9.00	17.20	69038
	9.05	17.16	69039
	9.30	16.90	69040
	9.40	17.10	69041
	9.45	33.14	69042
	9.50	12.32	69043
	11.30	12.14	69044
	12.40	12.30	69045
	14.25	11.96	69046
	15.30	12.18	69047
18/10/23	7.00	33.56	69859
	7.40	33.58	69860
	8.20	33.52	69861
	9.00	33.60	69862
	9.40	33.54	69863
	10.20	33.52	69864
	11.00	33.54	69865
	11.40	33.48	69866
	12.20	33.54	69867
	13.00	33.56	69868
	13.40	33.46	69869
	14.20	33.54	69870
	7.00	12.56	69119
	7.03	17.04	69120
	7.10	17.16	69121
	9.30	12.00	69122
	8.45	11.20	69123
	8.45	25.30	69124
	9.00	17.20	69125
	9.05	17.18	69126
	10.30	17.22	69127
	10.35	17.42	69128
	10.30	19.20	69129
	11.30	12.50	69130
	12.25	17.40	69131
	12.30	17.10	69132
	13.00	12.48	69133
	13.30	33.22	69134
	13.30	19.20	69135
	13.40	32.28	69136
	14.30	12.28	69137
	14.50	32.25	69138
	8.30	17.28	69048
19/10/23	7.00	33.50	69871
	7.40	33.54	69872
	8.20	33.50	69873
	9.00	33.58	69874
	9.40	33.50	69875
	9.40	13.00	69876
	11.30	11.28	69049
	11.20	10.00	69050
	7.00	11.80	69139
	12.30	12.10	70897
	13.15	19.51	70898
	13.10	18.98	70899
	13.30	20.00	70900
	11.39	5.00	11253
	12.00	33.00	11254
	12.06	19.20	11255
	12.30	10.30	11256
	14.00	11.50	11257
	12.32	33.65	11258
	15.15	12.12	11259
16/11/23	7.00	33.58	69981
	7.40	33.52	69982
	8.20	33.52	69983
	9.00	33.50	69984
	9.40	33.54	69985
	10.20	33.56	69986
	11.00	33.52	69987
	11.40	33.52	69988
	12.20	33.50	69989
	13.00	33.54	69990
	7.05	17.16	70945
	7.20	18.70	70946
	7.30	18.54	70947
	9.05	18.90	70948
	10.40	18.80	70949
	14.30	39.22	70950
	8.00	3.01	69904
	8.50	32.42	69905
	9.20	16.58	69906
	9.40	18.36	69907
	9.30	13.50	69908
	9.30	8.00	69909
	11.10	33.55	69910
	11.29	17.40	69911
	11.35	16.86	69912
	12.40	33.55	69913
	12.55	18.90	69914
	13.12	18.48	69915
	13.20	17.00	69916
	13.45	32.72	69917
	14.40	18.98	69918
	14.31	2.88	11260
17/11/23	7.00	33.56	69991
	7.40	33.64	69992
	8.20	33.54	69993
	9.00	33.54	69994
	8.52	17.76	69919
	10.05	1.46	68651
	10.16	17.70	68652
	11.20	2.40	68653
	11.40	17.98	68654
	13.40	32.50	68655
	13.50	12.76	68656
	9.40	33.60	68601
	10.20	33.52	68602
	11.00	33.50	68603
	11.40	33.58	68604
	12.20	33.56	68605
	8.40	2.88	9918
18/11/23	7.20	39.58	68606
	11.50	39.54	68607
	9.43	1.00	9919
20/11/23	7.00	33.54	68608
	7.40	33.54	68609
	8.20	33.50	68610
	9.00	33.56	68611
	9.40	33.52	68612
	10.20	33.50	68613
	11.30	33.56	68614
	12.20	33.52	68615
	7.15	19.05	68657
	7.30	19.64	68658
	8.10	32.12	68659
	8.15	39.18	68660
	8.30	33.55	68661
	8.45	19.30	68662
	9.00	19.74	68663
	9.10	17.30	68664
	10.30	19.30	68665
	10.35	19.64	68666
	11.00	6.00	68667
	11.10	17.00	68668
	11.30	31.41	68669
	11.15	32.00	68670
	12.00	19.35	68671
	12.15	19.84	68672
	12.50	17.28	68673
	13.35	32.19	68674
	13.40	31.25	68675
	13.50	19.35	68676
	13.45	19.75	68677
	15.10	31.57	68678
	7.00	33.62	71351
	7.40	33.58	71352
	8.20	33.50	71353
	9.00	33.52	71354
	9.40	33.58	71355
	9.00	33.50	91356
	10.15	33.50	71357
	11.30	33.50	71358
	12.20	33.50	71359
	13.30	33.50	71360
	14.40	33.56	71361
	15.20	33.48	71362
	16.00	33.60	71363
	16.40	33.54	71364
	15.10	33.52	71365
12/12/23	7.07	11.80	70448
	7.10	32.72	70449
	7.00	28.00	70450
	7.00	33.54	71366
	7.40	33.54	71367
	8.20	33.60	71368
	9.00	33.52	71369
	8.50	33.50	71370
	10.00	33.50	71371
	11.10	33.50	71372
	11.30	33.50	71373
	12.30	33.50	71374
	14.10	33.60	71375
	14.50	33.52	71376
	15.30	33.56	71377
	16.10	33.54	71378
	16.50	33.54	71379
	7.05	10.50	71401
	7.30	11.20	71402
	7.30	13.40	71403
	8.00	11.00	71404
	8.35	12.10	71405
	8.30	11.80	71406
	8.50	14.50	71407
	9.00	11.92	71408
	9.20	9.80	71409
	9.40	9.78	71410
	10.00	12.00	71411
	10.10	32.76	71412
	10.10	11.80	71413
	10.20	14.32	71414
	10.25	10.14	71415
	11.55	32.70	71416
	11.40	14.44	71417
	12.00	6.00	71418
	11.56	12.50	71419
	11.45	11.80	71420
	12.00	11.20	71421
	12.30	9.80	71422
	13.30	14.38	71423
	12.20	10.00	71424
	13.15	31.34	71425
	13.30	33.06	71426
	13.35	11.10	71427
	13.40	11.40	71428
	14.10	30.40	71429
	14.15	14.42	71430
	15.00	31.42	71431
	15.10	11.86	71432
	15.10	14.02	71433
13/12/23	8.00	11.20	71434
	7.15	31.40	71436
	7.30	12.04	71437
	7.30	0.51	71438
	8.20	11.00	71439
	9.00	5.00	71440
	9.25	32.50	71441
	9.30	11.50	71442
	9.50	11.00	71443
	10.16	8.00	71444
	11.05	11.20	71445
	11.35	33.50	71446
	12.10	0.69	71447
	12.30	11.10	71448
	13.20	11.66	71449
	14.15	39.52	71450
	7.00	33.56	71380
	7.10	33.60	71381
	7.40	33.54	71382
	7.50	33.54	71383
	8.20	33.50	71384
	8.30	33.52	71385
	8.30	33.54	71386
	8.40	33.50	71387
	10.20	33.52	71388
	11.50	33.50	71389
	12.00	33.50	71390
	13.20	33.50	71391

27/7/23	7.00	24.00	67332
	7.30	24.00	67333
	9.50	12.50	67335
	9.55	11.72	67336
	11.00	4.30	67337
	11.30	24.00	67338
	12.25	11.86	67339
	12.30	24.00	67340
	12.50	3.60	67341
	13.50	3.50	67342
	15.45	33.10	67343
	7.30	33.56	67280
	8.10	33.52	67281
	8.50	33.56	67282
	9.30	33.52	67283
	10.50	33.50	67284
	11.30	33.56	67285
	13.00	33.52	67286
	13.40	33.54	67287
	14.20	33.50	67288
	15.00	33.50	67289
	15.30	33.60	67290
	16.00	33.52	67291
	8.50	11.00	9906
28/7/23	7.20	33.17	67344
	7.30	24.00	67345
	7.35	24.00	67346
	7.40	16.20	67347
	9.06	14.00	67349
	7.30	33.54	67292
	8.00	17.40	68947
	8.45	33.72	68948
	10.00	15.90	68949
	10.30	16.72	68950
	10.30	17.34	68845
	10.30	17.28	68846
	10.30	12.50	68847
	11.25	14.00	68848
	11.50	14.38	68849
	12.00	24.00	68850
	14.25	17.40	67208
	12.10	24.00	67901
	12.35	17.00	67902
	13.33	12.74	67903
	14.00	17.38	67905
	14.25	17.52	10144
	15.00	3.88	10145
	15.15	24.24	10147
	15.40	17.64	10148
	13.13	5.00	10149
	8.10	33.54	67183
	8.50	33.52	67184
	9.30	33.58	67185
	10.40	33.52	67186
	11.20	33.50	67187
	12.10	33.56	67188
	13.00	33.50	67189
	13.40	33.50	67190
	14.20	33.50	67191
	15.00	33.54	67192
	15.40	33.50	67193
	14.30	33.56	67194
	14.55	37.80	67951
31/7/23	7.10	33.54	67952
	7.50	33.54	67953
	8.40	33.60	67954
	9.20	33.52	67955
	10.00	33.58	67956
	10.50	33.58	67957
	11.30	33.52	67958
	12.10	33.54	67959
	15.50	33.52	67960
	13.30	33.50	67961
	14.10	33.52	67962
	15.00	33.52	67963
	7.00	11.00	67293
	7.15	33.18	67294
	8.05	33.86	67295
	10.30	38.48	67296
	13.07	3.95	67297
	12.45	8.00	67298
	15.00	8.00	67299
	15.30	39.08	67300
	16.15	38.72	67209
	16.20	33.32	67210
	7.39	3.84	9864
	15.33	18.00	9865
	17.00	9.00	9866

	11.50	12.56	67479
	12.30	6.00	67480
	14.45	34.09	67481
	7.00	33.56	67424
	7.10	33.46	67425
	7.40	33.52	67426
	7.50	33.52	67427
	8.20	33.54	67428
	9.00	33.52	67429
	9.40	33.48	67430
	10.20	33.54	67431
	10.30	33.60	67432
	11.00	33.50	67433
	12.40	33.50	67434
	13.20	33.54	67435
	14.00	33.50	67436
	14.40	33.54	67437
18/8/23	8.15	39.22	67482
	7.00	33.52	67438
	7.40	33.54	67439
	8.20	33.50	67440
	8.40	33.54	67441
	7.53	15.24	10177
	12.07	18.00	10178
	8.23	4.00	10179
	8.25	6.00	10180
	8.45	10.00	67601
	10.10	38.01	67602
	10.45	11.50	67603
	12.45	10.50	67604
	8.25	34.09	68163
	9.40	39.38	68164
	11.30	12.26	68165
	14.25	34.60	68166
	15.30	39.30	68167
	14.28	5.00	10204
	14.33	20.00	10205
19/8/23	9.45	32.50	68168
	12.15	37.60	68169
	10.56	10.12	10206
21/8/23	7.00	33.52	68170
	7.40	33.54	68171
	8.20	33.50	68172
	9.00	33.62	68173
	9.40	33.56	68174
	12.00	33.52	68175
	15.10	33.52	68176
	16.00	33.60	68177
	16.40	33.54	68178
	7.00	34.10	67605
	7.30	7.20	67606
	7.50	6.00	67607
	8.15	39.60	67608
	8.25	34.10	67609
	9.45	34.06	67610
	11.25	33.12	67611
	13.30	33.02	67612
	14.10	39.00	67613
	16.20	2.40	67614
	7.40	15.00	10207
	14.04	3.60	10208
22/8/23	7.00	33.58	68179
	7.40	33.52	68180
	8.20	33.54	68181
	9.00	33.52	68182
	9.40	33.56	68183
	10.20	33.54	68184
	11.00	33.50	68185
	11.40	33.50	68186
	12.20	33.54	68187
	13.00	33.48	68188
	13.40	33.52	68189
	14.20	33.50	68190
	15.00	33.54	68191
	7.00	4.80	67615
	8.36	9.00	10209
	8.47	5.49	10210
	15.08	0.60	10211
	8.30	8.50	67616
	8.35	38.70	67617
	10.10	39.04	67618
	10.40	2.00	67619
	11.20	38.24	67620
	13.00	2.40	67621
	14.00	31.30	67622
	16.35	38.34	67623
23/8/23	7.30	33.54	68192
	7.40	33.60	68193
	8.20	33.54	68194
	8.30	33.52	68195
	9.00	33.50	68196
	9.10	33.54	68197
	9.40	33.52	68198

	10.25	36.70	69336
	10.35	7.50	69337
	10.30	19.20	69338
	12.00	37.20	69339
	14.15	37.74	69340
	15.15	19.20	69341
	15.40	37.70	69342
	15.45	19.20	69343
	7.00	33.46	70209
	7.40	33.52	70210
	8.20	33.52	70211
	9.00	33.58	70212
	9.40	33.54	70213
	10.20	33.58	70214
	11.00	33.50	70215
	11.40	33.50	70216
	12.20	33.64	70217
	13.00	33.48	70218
	13.40	33.54	70219
	8.50	19.74	70152
	13.00	19.20	70153
	8.00	2.50	9887
	9.35	3.78	9888
20/9/23	13.10	32.60	70154
	14.10	36.72	70155
	15.20	39.08	70156
	7.00	33.54	70220
	7.40	33.58	70221
	8.20	33.50	70222
	9.00	33.54	70223
	9.40	33.56	70224
	10.20	33.48	70225
	11.00	33.58	70226
	11.40	33.62	70227
	12.20	33.50	70228
	13.00	33.52	70229
	13.40	33.54	70230
	7.00	5.10	69345
	7.00	13.44	69344
	9.35	32.70	69346
	10.27	36.80	69347
	12.40	19.20	69348
	10.40	10.80	69349
	12.40	25.20	69350
	13.33	5.00	9889
21/9/23	7.20	32.66	70157
	8.45	33.02	70158
	10.15	32.62	70159
	10.45	36.76	70160
	12.10	32.92	70161
	13.20	32.72	70162
	7.00	33.54	70231
	7.40	33.64	70232
	8.20	33.52	70233
	9.00	33.52	70234
	9.40	33.56	70235
	10.20	33.60	70236
	11.00	33.50	70237
	11.40	33.56	70238
	12.20	33.54	70239
	13.00	33.52	70240
	13.40	33.56	70241
	11.39	0.20	9890
22/9/23	7.00	33.54	70242
	7.40	33.50	70243
	8.20	33.56	70244
	9.00	33.48	70245
	9.40	33.54	69199
	10.20	33.56	69200
	11.00	33.54	67765
	11.40	33.50	67766
	12.20	33.50	67767
	13.00	33.50	67768
	13.40	33.58	67769
	14.20	33.52	67770
	15.00	33.52	67771
	9.02	7.00	69373
	9.15	37.86	69375
	10.41	39.68	69376
	13.40	7.00	69377
	15.25	39.28	69378
	15.09	1.92	10188
25/9/23	7.00	33.56	67772
	7.40	33.50	67773
	8.20	33.62	67774
	9.00	33.52	67775
	9.40	33.56	67776
	10.20	33.52	67777
	10.20	12.00	67778
	12.20	12.00	67779
	14.10	33.50	67780
	14.50	33.54	67781
	15.30	33.52	67782

	7.20	33.08	69140
	7.00	21.60	69141
	8.30	12.04	69142
	8.35	33.02	69143
	8.40	33.28	69144
	9.35	33.96	69145
	9.30	11.54	69146
	9.55	33.17	69147
	8.45	11.80	69148
	10.00	11.80	69149
	10.00	19.20	69150
	11.30	32.00	70701
	11.45	32.72	70702
	12.00	12.00	70704
	12.45	17.74	70705
	12.30	17.28	70706
	14.29	32.30	70708
	11.51	36.00	10199
	12.32	33.00	10200
	12.36	21.60	9913
	14.40	4.80	9914
	16.37	38.40	9915
20/10/23	7.20	12.57	70651
	8.05	33.17	70652
	8.20	38.76	70653
	8.45	12.45	70654
	9.30	32.62	70655
	9.50	39.60	70656
	10.10	12.43	70657
	10.30	10.24	70658
	11.30	34.00	70659
	12.15	32.30	70660
	13.10	33.06	70661
	13.30	32.20	70662
	14.00	33.07	70663
	14.54	9.99	9916
	15.00	12.55	70751
21/10/23	11.40	39.48	70752
23/10/23	7.00	17.50	70753
	7.10	17.50	70754
	7.15	33.02	70755
	8.30	33.12	70756
	8.45	3.00	70757
	8.55	17.20	70758
	8.57	17.50	70759
	9.50	33.28	70760
	10.25	17.40	70761
	10.32	17.40	70762
	11.00	33.08	70763
	12.05	17.70	70764
	12.30	17.45	70765
	12.30	12.60	70766
	12.50	12.50	70767
	13.20	33.22	70768
	14.00	17.30	70769
	7.00	33.58	70801
	7.40	33.52	70802
	8.20	33.56	70803
	9.00	33.54	70804
	9.40	33.52	70805
	10.20	33.50	70806
	11.00	33.54	70807
	11.40	33.50	70808
	12.20	33.50	70809
	13.00	33.52	70810
	8.50	36.00	9801
24/10/23	7.00	33.50	70811
	7.40	33.54	70812
	8.20	33.50	70813
	9.00	33.58	70814
	9.40	33.50	70815
	10.20	33.50	70816
	11.00	33.52	70817
	11.40	33.48	70818
	12.20	33.56	70819
	13.00	33.54	70820
	13.40	33.50	70821
	14.20	33.52	70822
	7.00	15.36	70770
	7.00	11.50	70771
	7.00	11.54	70772
	7.25	17.44	70773
	7.00	33.50	70774
	7.00	17.28	70775
	8.30	33.17	70776
	8.30	11.50	70777
	9.10	17.00	70778
	9.30	33.06	70779
	9.45	11.75	70780
	10.10	19.20	70781
	10.50	17.30	70782
	11.00	16.70	70783
	11.10	11.80	70784

	15.30	33.50	68679
	9.30	9.50	9920
	10.59	2.20	9921
21/11/23	7.00	33.58	68616
	7.40	33.54	68617
	8.20	33.50	68618
	9.00	33.56	68619
	9.40	33.50	68620
	10.20	33.50	68621
	11.00	33.52	68622
	11.40	33.58	68623
	12.20	33.50	68624
	13.00	33.54	68625
	13.50	19.22	68701
	14.00	19.66	68702
	14.10	34.50	68703
	15.10	38.50	68704
	15.35	31.05	68705
	15.40	34.00	68706
	15.45	32.36	68707
	7.07	32.00	9923
	8.10	32.00	9923
	9.00	32.00	9923
	9.45	32.00	9923
	10.40	32.00	9923
	11.25	20.00	9923
22/11/23	7.00	33.58	68626
	7.40	33.50	68627
	8.20	33.62	68628
	9.00	33.54	68629
	9.15	33.50	68630
	10.30	33.50	68631
	11.40	33.50	68632
	12.50	33.50	68633
	13.30	33.56	68634
	14.10	33.48	68635
	14.50	33.52	68636
	15.30	33.54	68637
	16.10	33.54	68638
	7.00	39.68	68709
	7.00	30.69	68710
	7.15	32.12	68711
	7.15	19.20	68712
	7.20	19.02	68713
	7.37	19.60	68714
	8.30	32.12	68715
	8.40	31.69	68716
	8.50	19.20	68717
	8.55	19.00	68718
	9.10	19.46	68719
	10.20	39.00	68720
	10.30	31.59	68721
	10.45	19.70	68722
	10.55	19.00	68723
	11.00	7.20	68724
	11.00	19.55	68725
	12.10	32.05	68726
	12.24	39.00	68727
	12.10	19.70	68728
	12.25	19.36	68729
	12.28	19.44	68730
	13.30	32.08	68731
	14.05	9.00	68732
	14.30	31.95	68733
	14.25	19.40	68734
	14.30	19.00	68735
	14.30	9.00	68736
	14.30	19.64	68737
	15.10	38.50	68738
21/11/23	7.05	31.75	68680
Missed	7.15	19.35	68681
Book	7.20	19.40	68682
	7.25	19.58	68683
	7.30	32.00	68684
	8.30	31.61	68685
	9.00	19.30	68686
	9.00	19.30	68687
	9.05	19.53	68688
	9.15	32.19	68689
	10.10	32.15	68690
	10.30	19.35	68691
	10.35	19.34	68692
	10.42	19.64	68693
	11.00	2.58	68694
	11.50	31.01	68695
	12.00	19.25	68696
	12.10	19.42	68697
	12.26	19.41	68698
	13.30	32.06	68699
	13.45	19.55	68700
23/11/23	16.50	33.52	68639
	7.00	31.54	68739
	7.00	19.25	68740

	13.30	33.50	71392
	15.00	33.54	71393
	15.10	33.50	71394
	15.50	33.52	71395
	16.00	33.58	71396
	9.00	32.00	70359
	14.15	11.30	70360
	14.40	36.20	70361
	14.40	33.52	70362
	16.00	33.62	70363
	15.35	11.30	71271
	7.12	30.00	11267
	8.33	33.50	11268
14/12/23	7.00	33.58	71397
	7.40	33.54	71398
	8.00	33.48	71399
	8.10	33.64	71400
	8.35	12.14	70364
	9.00	30.50	70365
	10.45	14.14	70366
	11.40	13.50	70367
	13.50	14.44	70368
	14.45	38.88	70369
	7.00	10.92	71272
	7.00	12.10	71273
	7.25	33.02	71274
	8.30	32.77	71275
	10.35	12.22	71276
	12.00	12.06	71277
	13.15	12.10	71278
	14.45	11.50	71279
	14.48	12.16	71280
	8.40	33.56	71301
	8.50	33.50	71302
	9.30	33.50	71303
	9.40	33.54	71304
	10.10	33.50	71305
	10.20	33.58	71306
	10.00	33.50	71307
	10.20	33.50	71308
	11.30	33.50	71309
	11.40	33.50	71310
	12.40	33.50	71311
	12.50	33.50	71312
	14.10	33.50	71313
	14.20	33.52	71314
	15.00	33.54	71315
	15.20	33.46	71316
	7.49	33.50	11269
	9.30	15.00	11270
15/12/23	7.00	11.50	70370
	7.04	17.00	70371
	7.15	17.10	70372
	7.15	11.42	70373
	7.20	14.30	70374
	7.30	12.58	70375
	7.35	12.20	71317
	8.30	11.54	71318
	8.15	11.50	71319
	8.45	13.90	71320
	8.45	17.30	71321
	8.50	17.38	71322
	8.55	12.06	71323
	7.43	1.68	11271
	7.00	32.00	10243
	7.40	32.00	10243
	8.00	32.00	10243
	8.45	32.00	10243
	9.30	32.00	10243
	12.15	15.00	9806
	13.00	5.00	9807
	9.17	11.00	9935
	9.30	12.00	70451
	9.40	10.68	70452
	10.00	11.78	70453
	10.10	14.60	70454
	10.15	12.22	70455
	10.22	39.00	70456
	10.33	24.00	70457
	10.35	17.30	70458
	10.35	17.00	70459
	10.35	14.08	70460
	11.00	11.50	70461
	11.10	14.42	70462
	11.40	11.50	70463
	11.50	12.22	70464
	11.51	11.38	70465
	11.40	38.50	70466
	11.50	17.00	70467
	12.20	14.12	70468
	12.20	17.00	70469
	12.30	11.78	70470
	13.25	16.95	70471

	9.50	33.56	68199
	11.40	33.50	68200
	7.00	3.00	67624
	7.50	33.01	67625
	9.05	33.18	67626
	9.00	11.56	67627
	9.30	11.70	67628
	9.50	32.94	67629
	10.25	33.08	67630
	11.00	11.44	67631
	10.58	11.94	67632
	11.40	33.48	67633
	11.45	33.22	67634
	12.00	11.72	67635
	12.30	12.36	67636
	12.20	32.50	67637
	13.00	11.92	67638
	13.45	33.08	67639
	14.10	11.72	67640
	15.30	12.20	67641
	12.20	33.52	67501
	13.00	33.56	67502
	13.40	33.54	67503
	14.20	33.50	67504
	7.18	30.00	10212
	8.48	18.82	10213
	13.25	15.00	10215
24/8/23	7.45	32.00	67642
	8.00	12.40	67643
	8.10	33.14	67644
	8.40	33.12	67645
	9.00	11.58	67646
	9.30	32.78	67647
	10.35	12.02	67649
	11.40	12.10	67650
	7.00	33.50	67505
	7.10	33.58	67506
	7.40	33.54	67507
	7.50	33.54	67508
	8.20	33.52	67509
	9.00	33.62	67510
	9.50	33.50	67511
	10.30	33.50	67512
	11.10	33.56	67513
	11.50	33.54	67514
	12.30	33.48	67515
	13.10	33.50	67516
	10.15	12.00	67551
	13.10	3.21	67552
	13.15	11.96	67553
	14.20	11.86	67554
	15.25	12.38	67555
	15.40	39.18	67556
	9.00	6.94	10216
	9.00	20.22	10217
	9.30	14.00	10217
	14.37	5.20	10218
25/8/23	7.00	33.54	67517
	7.40	33.50	67518
	7.30	2.00	67557
	8.05	38.50	67442
	8.50	11.48	67443
	9.00	33.08	67444
	9.50	38.76	67445
	10.00	37.90	67446
	10.45	38.28	67447
	13.45	33.06	67448
	14.20	37.00	67449
	15.00	39.58	67450
	8.20	33.56	67483
	9.00	33.52	67484
	9.40	33.52	67485
	10.20	33.58	67486
	11.00	33.54	67487
	11.40	33.50	67488
	12.20	33.58	67489
	13.00	33.50	67490
	13.40	33.54	67491
	14.20	33.60	67492
	15.15	32.78	67970
	12.46	6.00	10181
	15.00	32.76	67240
26/8/23	11.05	33.32	67241
28/8/23	7.15	17.98	67242
	7.15	12.50	67243
	7.20	12.02	67244
	7.30	11.54	67245
	7.30	19.38	67246
	7.55	17.00	67247
	7.53	11.70	67248
	8.00	11.12	67249
	8.30	9.98	67250
	7.00	17.00	67971

	15.40	33.56	67783
	16.20	33.50	67784
	16.30	33.50	67785
	7.06	0.08	69379
	7.15	33.26	69380
	8.30	33.07	69381
	9.00	32.00	69382
	9.45	32.92	69383
	10.30	17.28	69384
	13.20	19.20	69385
	13.20	33.18	69386
	14.36	14.24	69387
	15.00	31.40	69388
	7.46	14.40	10189
	9.48	10.00	10190
	11.21	4.00	10191
	11.36	4.40	10192
26/9/23	7.00	33.58	67786
	7.40	33.50	67787
	8.20	33.48	67788
	9.00	33.54	67789
	9.00	12.00	67790
	11.30	33.52	67791
	12.10	33.62	67792
	12.50	33.50	67793
	13.30	33.52	67794
	14.20	33.58	67795
	15.00	33.48	67796
	9.00	33.06	69389
	9.00	9.50	69390
	10.00	17.28	69391
	10.15	32.72	69392
	11.00	38.96	69393
	12.20	7.20	69394
	13.00	12.50	69395
	13.00	19.20	69396
	13.15	6.00	69397
	13.40	33.02	69398
	14.00	38.34	69399
	14.39	14.00	10193
27/9/23	7.00	33.54	67797
	7.40	33.60	67798
	8.20	33.54	67799
	9.00	33.52	67800
	7.45	7.20	69400
	9.40	33.58	67821
	10.00	12.00	67822
	11.30	33.50	67823
	12.10	33.52	67824
	12.50	33.54	67825
	13.30	33.50	67826
	14.10	33.50	67827
	14.50	33.54	67828
	15.30	33.52	67829
	9.00	32.00	67728
	10.50	7.20	67729
	11.30	11.90	67730
	12.00	33.08	67731
	12.55	12.20	67732
	13.00	24.50	67733
	13.25	38.42	67734
	13.40	33.11	67735
	13.50	32.79	67736
	14.30	11.92	67737
	15.00	19.20	67738
	15.30	12.24	67739
	7.21	0.96	10194
	9.18	6.00	10195
	11.05	2.00	10196
28/9/23	7.00	33.50	67830
	7.40	33.54	67831
	8.20	33.52	67832
	9.00	33.58	67833
	9.40	33.56	67834
	10.00	12.00	67835
	13.00	13.00	67836
	13.10	33.62	67837
	13.50	33.52	67838
	14.30	33.56	67839
	15.10	33.54	67840
	7.15	11.74	67740
	12.40	10.90	67741
	14.00	33.08	67742
	14.20	10.96	67743
	12.00	9.00	67744
	13.00	9.00	67744
	14.00	9.00	67744
	15.00	9.00	67744
	14.45	39.04	67745
	15.05	38.28	67746
	16.15	38.96	67747
	9.00	7.20	70246
	9.50	6.80	70247

	11.50	33.50	70785
	12.30	17.40	70786
	12.15	17.28	70787
	13.20	12.00	70788
	14.15	12.40	70789
	15.00	39.60	70790
	15.30	11.28	70791
	9.06	19.60	9802
	9.38	7.00	9803
25/10/23	7.00	33.56	70823
	7.40	33.50	70824
	8.20	33.50	70825
	9.00	33.54	70826
	9.40	33.56	70827
	10.20	33.48	70828
	11.00	33.56	70829
	11.40	33.52	70830
	12.20	33.62	70831
	13.00	33.56	70832
	13.40	33.50	70833
	7.18	4.50	70792
	7.45	11.82	70794
	7.57	17.66	70795
	9.00	33.10	70796
	9.00	11.80	70797
	10.15	33.12	70798
	10.35	11.84	70799
	10.45	32.70	70800
	11.00	52.80	70901
	11.50	32.82	70902
	12.00	12.00	70903
	13.20	32.50	70904
	13.30	11.00	70905
	13.35	33.08	70906
	14.39	11.28	70907
	14.45	11.82	70908
	9.56	0.60	9804
	10.38	8.00	9805
26/10/23	7.00	33.52	70834
	7.40	33.50	70835
	8.00	33.50	70836
	9.20	33.50	70837
	10.59	33.50	70838
	7.55	6.00	70909
	8.10	2.16	70951
	7.10	19.28	70952
	10.00	11.00	70953
	10.15	17.90	70954
	12.56	6.22	70955
	15.00	28.66	70956
27/10/23	8.00	12.36	70957
	8.50	12.36	70958
	9.30	12.36	70959
	10.55	12.36	70960
	11.55	12.36	70961
	12.00	32.70	70962
	12.15	32.00	70963
	13.05	12.36	70964
	13.45	33.12	70965
	14.58	8.00	9751
28/10/23	8.50	33.60	70966
30/10/23	7.25	38.70	70967
	13.00	32.00	70968
	14.10	38.90	70969
	7.00	33.64	70839
	7.40	33.54	70840
	8.20	33.54	70841
	9.00	33.58	70842
	9.10	33.50	70843
	10.30	33.50	70844
	11.40	33.50	70845
	13.00	33.50	70846
	13.40	33.52	70847
	14.20	33.50	70848
	15.00	33.54	70849
	15.40	33.52	70850
	7.28	2.40	9752
	12.00	16.80	9753
	13.12	7.94	9754
31/10/23	7.15	33.07	70970
	7.30	32.50	70971
	7.00	17.28	70972
	8.10	39.24	70973
	8.30	32.98	70974
	10.00	19.20	70975
	11.00	36.30	70976
	11.20	33.07	70977
	12.30	11.98	70978
	13.00	19.20	70979
	14.26	39.38	70980
	14.15	12.60	70981
	15.40	12.20	70982
	15.50	39.36	70983

	7.15	20.40	68741
	7.20	19.20	68742
	8.00	2.04	68743
	8.15	33.08	68744
	8.35	30.05	68745
	9.00	19.50	68746
	8.50	20.60	68747
	9.05	19.09	68748
	10.35	30.31	68749
	10.45	19.20	68750
	7.00	33.54	68640
	7.40	33.58	68641
	7.40	33.52	68642
	9.00	33.62	68643
	9.40	33.56	68644
	10.20	33.50	68645
	11.00	33.52	68646
	11.40	33.50	68647
	12.20	33.54	68648
	13.00	33.54	68649
	13.40	33.50	68650
	11.53	28.80	9925
	10.25	20.60	68551
	10.50	19.12	68552
	11.45	36.10	68553
	12.10	32.05	68554
	12.30	19.25	68555
	12.00	20.40	68556
	12.30	19.50	68557
	12.30	38.50	68558
	13.20	2.61	68559
	14.20	33.52	68560
	14.20	30.15	68561
	14.30	33.05	68562
24/11/23	7.22	31.48	68563
	7.37	30.64	68564
	8.10	33.86	68565
	9.20	38.50	68566
	9.40	32.84	68567
	11.35	33.17	68568
	12.10	31.56	68569
	12.19	31.60	68570
	12.45	9.00	68571
	13.30	32.72	68572
	14.40	33.45	68573
	7.00	33.52	69920
	7.40	33.60	69921
	8.20	33.54	69922
	9.00	33.52	69923
	9.40	33.58	69924
	10.10	33.50	69925
	11.30	33.50	69926
	13.10	33.58	69927
	13.50	33.54	69928
	14.30	33.52	69929
	15.19	2.50	11261
	16.00	33.41	69995
	16.25	39.20	69996
27/11/23	7.20	33.07	69997
	8.15	11.00	69998
	8.55	9.00	69999
	9.50	7.00	70000
	10.30	33.12	70251
	11.10	32.97	70252
	13.40	38.50	70253
	14.00	39.42	70254
	14.00	33.18	70255
	11.21	2.00	11262
	7.00	33.58	71101
	7.40	33.56	71102
	8.20	33.52	71103
	9.00	33.52	71104
	9.40	33.56	71105
	10.20	33.50	71106
	11.00	33.60	71107
	11.40	33.54	71108
	8.49	2.00	10241
28/11/23	7.00	33.54	71109
	7.40	33.52	71110
	8.20	33.58	71111
	9.00	33.58	71112
	9.40	33.54	71113
	10.20	33.48	71114
	11.00	33.54	71115
	11.30	33.50	71116
	13.00	33.52	71117
	7.10	30.93	70256
	7.15	34.20	70257
	7.23	10.68	70258
	8.35	12.22	70259
	8.45	31.15	70260
	9.01	17.90	70261
	10.30	31.55	70262

	13.27	10.88	70472
	13.30	11.88	70473
	14.00	12.16	70474
	14.00	13.82	70475
	14.25	17.70	70476
	14.45	11.30	70477
	15.10	13.92	70478
	15.25	10.20	70479
	16.30	13.70	70480
	16.30	13.70	70481
	16.40	37.00	70482
16/12/23	8.45	32.50	70483
	10.10	32.48	70484
18/12/23	7.10	33.06	70485
	7.10	11.96	70486
	7.35	39.30	70487
	8.30	33.18	70488
	8.20	12.10	70489
	9.15	39.20	70490
	9.30	32.00	70491
	9.50	33.12	70492
	10.15	11.70	70493
	12.30	12.00	70494
	12.25	12.64	70495
	13.15	32.50	70496
	13.45	33.08	70497
	14.30	12.14	70498
	14.45	32.50	70499
	15.50	38.00	70500
	16.10	39.34	70551
	7.00	33.52	71451
	7.40	33.50	71452
	8.20	33.56	71453
	15.20	33.54	71454
	16.10	33.54	71455
	16.50	33.50	71456
19/12/23	7.00	33.54	71457
	7.40	33.50	71458
	8.20	33.56	71459
	9.00	33.54	71460
	9.40	33.58	71461
	10.20	33.52	71462
	11.00	33.50	71463
	11.40	33.56	71464
	12.20	33.56	71465
	13.00	33.54	71466
	8.10	33.23	70554
	10.00	11.57	70555
	11.05	32.30	70556
	11.40	6.00	70557
	11.30	12.00	70558
	13.15	12.00	70559
	13.40	32.60	70560
	15.24	38.60	70561
20/12/23	7.00	33.58	71467
	7.40	33.54	71468
	8.20	33.64	71469
	9.00	33.54	71470
	9.00	33.50	71471
	9.40	33.52	71472
	15.00	38.60	71473
	15.15	39.52	71474
21/12/23	9.15	32.62	69401
	9.30	39.58	69402
	9.50	39.20	69403
	10.40	15.26	69404
	11.37	18.02	69405
	12.00	32.50	69406
	12.15	14.86	69407
	13.50	15.06	69408
	15.10	15.05	69409
	16.20	39.62	69410
	16.25	15.12	69411
22/12/23	7.10	32.22	70376
	7.20	15.18	70377
	7.50	38.60	70378
	8.20	32.17	70379
	8.25	15.20	70380
	8.50	38.70	70381
	9.30	32.22	70382
	9.45	15.04	70383
	10.30	38.60	70384
	11.00	21.00	70385
	11.40	21.00	70385
	11.00	32.12	70329
	10.55	15.90	70330

				7.00	33.54	67972		11.38	11.40	70248		7.00	33.54	70910			11.05	11.54	70263
				7.40	33.54	67973		12.35	5.74	70249		7.40	33.54	70911			11.15	11.84	70264
				8.20	33.54	67974		13.10	11.96	70250		8.20	33.56	70912			11.30	4.80	70265
				9.00	33.52	67975	29/9/23	7.00	33.58	67841		9.00	33.50	70913			12.35	31.79	70266
				12.40	33.56	67976		7.40	33.54	67842		9.40	33.50	70914			12.50	33.72	70267
				13.20	33.52	67977		8.20	33.48	67843		10.20	33.54	70915			13.15	33.03	70268
				14.00	33.50	67978		13.25	33.06	71078		11.00	33.50	70916			14.40	31.65	70269
				14.40	33.52	67979		14.14	39.62	71079		12.10	33.50	70917			16.15	31.51	70270
				15.20	33.50	67980		15.00	33.90	71080		13.40	33.56	70918			7.00	4.80	11263
				16.00	33.56	67981		10.20	39.50	68248		14.20	33.50	70919		29/11/23	7.00	33.58	71118
				9.00	10.56	67493		11.45	33.08	68249		15.00	33.48	70920			7.40	33.54	71119
				9.20	11.60	67494		13.00	7.20	68250		15.40	33.56	70921			8.20	33.54	71120
				10.00	36.94	67495		9.00	33.50	69001		16.20	33.54	70922			9.00	33.56	71121
				11.00	17.82	67497		9.40	33.46	69002		7.05	12.00	9755			9.40	33.50	71122
				9.40	10.56	67519		10.30	33.54	69003		13.27	0.43	9756			10.20	33.56	71123
				10.00	17.50	67520		11.10	33.54	69004		15.23	9.00	9757			11.00	33.64	71124
				10.30	19.86	67521		11.50	33.52	69005							11.40	33.52	71125
				10.30	2.00	67522		12.30	33.48	69006							12.20	33.50	71126
				10.40	17.00	67523		13.10	33.52	69007							13.00	33.52	71127
				9.40	10.44	67524											7.25	11.50	70271
				11.00	10.58	67525											7.35	31.79	70273
				11.20	11.95	67526											7.00	23.04	70274
				11.50	10.40	67527											7.30	0.40	70275
				11.55	11.06	67528											8.00	32.12	70276
				12.10	12.50	67529											9.50	31.95	70277
				12.25	6.00	67530											9.25	11.24	70278
				12.40	17.91	67531											11.00	7.20	70279
				12.35	17.50	67532											10.49	31.57	70280
				13.00	20.06	67533											11.30	10.78	70281
				13.00	10.50	67534											12.40	31.79	70282
				13.00	17.00	67535											13.10	33.20	70283
				13.20	12.35	67536											14.00	33.27	70284
				14.20	39.36	67537											13.00	25.92	70285
				14.20	12.20	67538											14.10	39.32	70286
				14.20	10.54	67539											15.10	31.73	70287
				14.34	3.00	67540											16.15	39.68	70288
				14.35	32.42	67541											11.46	2.00	11264
				15.25	11.86	67542										30/11/23	7.19	3.60	70289
				15.20	9.64	67543											7.15	31.65	70290
				15.35	39.66	67544											7.00	24.96	70291
				8.27	9.60	10182											8.30	19.00	70292
				9.08	13.00	10183											8.56	18.02	70293
				10.48	9.60	10184											10.40	33.12	70294
			29/8/23	7.00	33.56	67982											12.40	8.00	70295
				7.40	33.50	67983											14.00	33.08	70296
				8.20	33.48	67984											16.00	39.00	70297
				9.00	33.54	67985											7.00	33.56	71128
				9.40	33.46	67986											7.40	33.48	71129
				10.20	33.58	67987											8.20	33.54	71130
				11.00	33.50	67988											9.40	33.54	71131
				11.40	33.52	67989											10.20	33.56	71132
				12.30	33.50	67990											11.00	33.54	71133
				13.10	33.50	67991											11.40	33.50	71134
				13.50	33.48	67992											12.20	33.54	71135
				14.30	33.54	67993											13.00	33.56	71136
				15.10	33.56	67994											13.40	33.56	71137
				7.12	19.46	67498													
				7.22	11.90	67499													
				7.24	30.24	67500													
				7.08	10.92	67545													
				7.30	16.76	67546													
				7.35	18.70	67547													
				7.40	10.60	67548													
				7.50	23.00	67549													
				7.00	16.80	67550													
				10.00	19.48	68351													
				10.33	16.80	68352													
				10.00	10.66	68353													
				10.50	11.70	68354													
				11.05	19.46	68355													
				12.15	32.60	68356													
				12.30	28.00	68357													
				12.40	19.58	68358													
				13.20	9.50	68359													
				13.25	19.10	68361													
				13.40	19.50	68362													
				14.20	38.30	68363													
				14.40	31.68	68364													
				7.54	19.66	67558													
				8.10	2.00	67559													
				8.25	11.60	67560													
				8.30	10.60	67561													
				8.40	10.04	67562													
				9.30	11.60	67563													
				9.15	10.62	67564													
				9.40	10.40	67565													
				10.50	10.30	67566													
				10.55	19.00	67567													
				11.40	1.96	67568													
				11.50	17.78	67569													
				13.37	6.00	10185													
				13.41	10.00	10186													
				12.48	25.86	10219													

30/8/23	7.00	33.58	67995
	7.40	33.50	67996
	8.20	33.52	67997
	9.00	33.54	67998
	9.40	33.54	67999
	10.20	33.48	68000
	9.00	32.22	68301
	9.30	19.07	68302
	11.00	33.50	68303
	11.40	33.52	68304
	12.20	33.50	68305
	13.00	33.60	68306
	13.40	33.54	68307
	7.00	17.00	68251
	8.00	25.46	68252
	8.25	17.84	68253
	9.35	19.56	68254
	9.45	17.00	68255
	10.30	32.12	68256
	11.03	9.00	68257
	11.05	0.59	68258
	12.00	19.21	68259
	12.10	19.40	68260
	12.20	17.78	68261
	12.30	17.00	68262
	13.45	25.78	68263
	14.50	19.48	68264
	15.20	38.66	68265
	7.22	3.00	10221
	7.21	29.70	10222
	7.42	3.00	10223
	13.00	1.50	10224
	14.06	14.50	10225
31/8/23	7.00	33.56	68308
	7.40	33.50	68309
	8.20	33.52	68310
	9.00	33.58	68311
	9.40	33.54	68312
	10.20	33.50	68313
	11.00	33.50	68314
	10.30	33.50	68315
	11.40	33.50	68316
	12.45	33.50	68317
	13.50	33.56	68318
	14.30	33.50	68319
	15.20	33.46	68320
	7.00	19.44	68266
	7.06	17.64	68267
	7.15	17.70	68268
	7.20	17.00	68269
	7.30	33.12	68270
	7.30	12.00	68271
	8.00	25.56	68272
	8.45	12.02	68273
	9.30	19.70	68274
	9.45	17.92	68275
	10.00	17.60	68276
	10.00	17.00	68277
	10.20	0.50	68278
	10.15	11.34	68279
	11.20	12.36	68280
	12.00	19.12	68281
	12.30	17.00	68282
	12.32	18.00	68283
	12.45	17.50	68284
	13.00	11.72	68285
	13.15	12.62	68286
	13.15	25.32	68287
	14.10	11.72	68288
	14.15	11.68	68289
	15.15	39.44	68290
	15.30	11.78	68291
	15.25	12.18	68292
	15.30	32.32	68293
	15.45	17.76	68294
	16.20	33.20	68295
	16.50	39.22	68296
	11.57	6.00	10187
	12.15	11.70	10187
	13.00	11.80	10187
	13.35	11.70	10187
	14.05	12.30	10187