

Part 2

First Forward Program

for

M(MO)L7 "Horsley Park Plant 23 Quarry"

for the period

1 August 2022 to 31 July 2025

Compiled by:





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1 August 2022 to 31 July 2025

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PART 2 FORWARD PROGRAM

2.1 THREE YEAR FORECAST – SURFACE DISTURBANCE ACTIVITIES

2.1.1 Project Description

The Horsley Park Plant 23 Quarry (the Quarry) is located approximately 4km west of Prospect Reservoir in western Sydney adjacent to the Horsley Park Brick Plant 23 (Plant 23). The Quarry is owned and operated by The Austral Brick Company Pty Limited (Austral Bricks), under Mining (Mineral Owner) Lease 7 (M(MO)L7) and Development Application (DA) 1340, DA129/92 and DA313/82. It is noted that these consents do not specify a project life or end date for extraction operations within the Quarry Site. Based on current production rates at the Quarry and the extent of known resources, extraction operations at the Quarry are anticipated to be completed by 2026.

2.1.2 Description of Surface Disturbance Activities

2.1.2.1 Exploration Activities

No exploration activities are currently planned within the Quarry Site during the remaining life of the Quarry.

2.1.2.2 Construction Activities

No construction activities are anticipated to be undertaken during the remaining life of the Quarry.

2.1.2.3 Mining Schedule

Extraction Sequencing

Extraction during the remainder of the life of the Quarry will involve recovery of clay/shale either by scrapers (principally clay materials) or by excavator and haul truck (shale and sandstone materials). The more competent materials will require ripping by bulldozer prior to excavation, however, no blasting will be required. Recovered raw materials will then be placed into blended or temporary stockpiles within the extraction area prior to loading onto haulage vehicles and despatch from the Quarry Site.

Given previous site disturbance, it is expected that only minor clearing of vegetation or topsoil stripping will be required for the remainder of the life of the Quarry.

Emplacements

No additional overburden materials are expected to be encountered for the remainder of the life of the Quarry, however, in the event that some of the raw materials are not suitable for brick manufacture, these will be stockpiled within the extraction area for future use in final landform construction.

Waste Disposal

Negligible wastes will be generated within the Quarry given all amenities and workshop facilities are located within Plant 23 Brick Plant and not within the Quarry Site. Wastes that may be produced within the Quarry include the following.

- Wastes such as greases, oils, filters, tyres and batteries from maintenance of mobile equipment will be managed by the earthmoving contractor outside the Quarry Site;
- General wastes produced by the contactor's employees e.g. food scraps, drink and food packaging will be collected at the amenities building within the Plant 23 Brick Plant precinct.

Table 1 presents the indicative material production schedule forecast for the next three years.

Table 1
Indicative Material Production Schedule During the Next Three Years

Material	Unit Year 1		Year 2	Year 3	
Stripped topsoil (if applicable)	bcm	0	0	0	
Rock/overburden	bcm	0	0	0	
Ore (clay/shale)	t	636 844	650 000	650 000	
Reject Material	t	0	0	0	
Product	t	636 844	650 000	650 000	

2.2 THREE YEAR REHABILITATION FORECAST

2.2.1 Rehabilitation Planning Schedule

2.2.1.1 Stakeholder Consultation

Given the scale of the Quarry and consultation undertaken as part of the preparation of Version 1 of the RMP no further stakeholder consultation is currently planned or considered necessary during the Forward Program period.

2.2.1.2 Rehabilitation Assessment and Methodologies

Final Landform

As detailed in the *Rehabilitation Management Plan* for the Quarry, the entirety of the Quarry Site will be progressively rehabilitated with stabilised pastoral cover prior to future industrial / commercial land use.

No additional studies, risk assessments or design work will be completed with regard to the final landform over the Forward Program period.

Surface Water Management

No water management infrastructure will be retained within the final landform; therefore, no specific assessment or management measures are required.

Final Void Management

The final landform will not comprise any areas defined as "final void" therefore, no specific assessment or management measures are required.

Tailings Dam Decommissioning

No tailings dams are present within the Quarry Site therefore, no specific assessment or management measures are required.

2.2.2 Rehabilitation Research and Trials

No rehabilitation trials are currently taken within the Quarry Site as the rehabilitation techniques are based principally upon engineering and water management principles which are well understood. The relevant techniques have previously been used at other extraction sites on land owned by Austral Bricks that was used for clay/shale extraction.

Given that the final landform will be revegetated to stabilised pastoral cover prior to future industrial / commercial land use, future rehabilitation research and trials will not be required.

2.2.3 Rehabilitation Maintenance and Corrective Actions

As this is the first Forward Program for the Quarry and an Annual Rehabilitation Report has not been prepared, no rehabilitation performance issues or knowledge gaps identified in an Annual Rehabilitation Report are noted. Notwithstanding, previous rehabilitation activities at the Quarry have proved successful with no specific maintenance or corrective actions identified.

2.2.4 Rehabilitation Schedule

Due to the relatively small operational area within Quarry Site and lack of ancillary infrastructure, rehabilitation of the Quarry Site will occur following cessation of extraction operations within M(MO)L7. It is noted that the backfilling, final landform creation may occur over a number of years following cessation of extraction operations.

2.2.5 Subsidence Remediation for Underground Operations

As no underground operations are conducted as part of the Quarry's operations, no subsidence remediation is required.

2.3 PLAN 2 – MINING AND REHABILITATION THREE YEAR FORECAST

Plan 2A Mining and Rehabilitation Three Year Forecast (Year 1)
A3/Colour

Plan 2B Mining and Rehabilitation Three Year Forecast (Year 2)

A3/Colour

Plan 2C Mining and Rehabilitation Three Year Forecast (Year 3)

A3/Colour

2.4 PROGRESSIVE MINING AND REHABILITATION STATISTICS

2.4.1 Three Yearly Forecast Cumulative Disturbance and Rehabilitation Progression

All site establishment and disturbance activities have been completed and no further disturbance is planned over the Forward Program period. A total of 4.9ha of surface disturbance, and a total of 0.9ha of ground-cover stabilisation has been completed to date. **Table 2** presents a summary of the predicted cumulative disturbance and rehabilitation progression during the Forward Program period.

Table 2
Predicted Cumulative Disturbance and Rehabilitation Progression during the next
Three-Year Term

	Year 1	Year 2	Year 3
Total disturbance footprint – surface disturbance (ha)	4.9	4.9	4.9
Underground mining area (ha)	N/A	N/A	N/A
Total active disturbance (ha)	4.9	4.9	4.9
Rehabilitation – land preparation (ha)	0	0	0
Ecosystem and land use establishment (ha)	0.9	0.9	0.9

2.4.2 Rehabilitation Key Performance Indicators

No further active disturbance or rehabilitation activities will be undertaken during the Forward Program period, as presented in **Table 3**.

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Table 3 Progressive Rehabilitation Key Performance Indicators during the Next Three-Year Term

	Year 1	Year 2	Year 3
Total new active disturbance area during reporting period (ha)	0	0	0
Area of land proposed for active rehabilitation during reporting period	0	0	0
Annual Rehabilitation to Disturbance Ratio	NA	NA	NA

2.5 REHABILITATION COST ESTIMATE

In accordance with the Form and Way - Annual Rehabilitation Report and Forward Program for Large Mines, an updated Rehabilitation Cost Estimate for the Quarry prepared based on the "maximum disturbance within a term" method is included below.