

Cape Flattery Silica

“Cape Flattery - no longer a secret”

Brisbane Mining Investor Conference

13 March 2024



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Metallica Minerals Limited (ASX: MLM)
A critical minerals company

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Listing Rule & Competent Person Statements



ASX Announcements – The following announcements are cited in this presentation:

1. See ASX Release 15 November 2023 “Cape Flattery Silica Updated DFS supports 3Mtpa saleable product”
2. See ASX Release 15 December 2023 “CFS Project declared a Coordinated Project “
3. See ASX Results 19 September 2023 “Bulk metallurgical tests confirm High Purity Silica Sand”
4. See ASX Release 1 June 2023 “Extension of MOU to explore off-take arrangements”.

The statements in this presentation concerning Mineral Resource Estimates at the CFS Project are derived from ASX announcements 1 and 3.

Listing Rule 5.23

The Company confirms that it is not aware of any new information or data that materially affects the information included in these original market announcements and, in the case of estimates of mineral resources or ore reserves and production forecasts and forecast financial information, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

Statements concerning production targets and related financial information are derived from ASX announcements 3 and 5 above.

Listing Rule 5.19.2

The Company confirms that all material assumptions underpinning the production target and corresponding financial information continue to apply and have not materially changed.

Competent Person Statement

The information in this report that relates to the Cape Flattery Silica Project – Eastern Resource Area is based on information and modelling carried out by Chris Ainslie, Project Engineer, who is a full-time employee of Ausrocks Pty Ltd and a Member of the Australasian Institute of Mining & Metallurgy. The work was supervised by Mr Carl Morandy, Mining Engineer who is Managing Director of Ausrocks Pty Ltd and a Member of the Australasian Institute of Mining & Metallurgy and also by Mr Brice Mutton who is a Senior Associate Geologist for Ausrocks Pty Ltd. Mr Mutton is a Fellow of the Australasian Institute of Mining & Metallurgy and a Fellow of the Australian Institute of Geoscientists.

Mr Morandy and Mr Ainslie and Mr Mutton are employed by Ausrocks Pty Ltd who have been engaged by Metallica Minerals Ltd to prepare this independent report, there is no conflict of interest between the parties. Mr Morandy, Mr Ainslie and Mutton consent to the disclosure of information in the form and context in which it appears in this report.

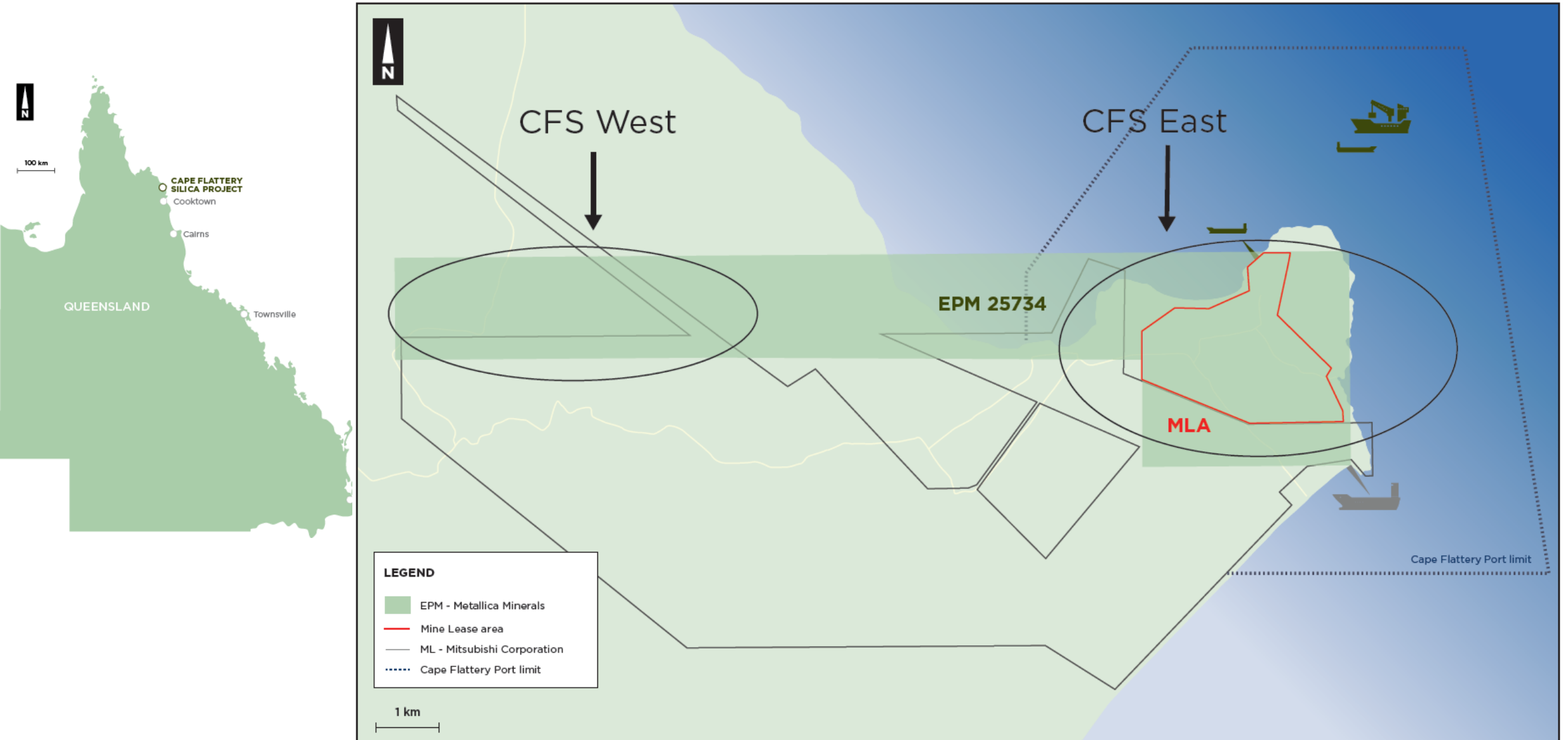
The overall resource work for the Cape Flattery Silica Project – Eastern Resource Area is based on the direction and supervision of Mr Mutton who has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”.

Cape Flattery Silica Sand Exploration Results

The information in this report that relates to the Exploration Sampling and Exploration Results is based on information compiled by Mr Patrick Smith, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy.

Mr Smith is the owner and sole Director of PSGS Pty Ltd and is contracted to Metallica Minerals as their Exploration Manager. Mr Smith confirms there is no potential for a conflict of interest in acting as the Competent Person. Mr Smith has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Smith consents to the inclusion of this information in the form and context in which is appears in this release/report.

Cape Flattery Silica Project Location



Company Highlights



Cape Flattery Silica (CFS) is **100% owned** by Metallica Minerals



47Mt Reserve high purity Silica Sand resource¹



Updated DFS highlights strong positive, low Capex, low Opex and Reserve for 15 years production¹



Deemed Co-ordinated Project by Office of Coordinator General²



CFS project has a **transport solution** – located within Port Limit of Cape Flattery



Excellent internal Metallurgical test results received – potential customer acceptance underway³



Booming production of Solar panels stimulates significant demand for high purity silica sand



MoU extended with Mitsui⁴

1. See ASX Release 15 November 2023 “Cape Flattery Silica Updated DFS supports 3Mtpa saleable product”, 2. See ASX Release 15 December 2023 “CFS Project declared a Coordinated Project”, 3. See ASX Results 19 September 2023 “Bulk metallurgical tests confirm High Purity Silica Sand”, 4. See ASX Release 1 June 2023 “Extension of MOU to explore off-take arrangements”.

Corporate snapshot



Share Price

2.9c

(as at 11 March 2024)

Cash

\$4.1m

(as at 29 February 2024)

Ordinary Shares

959.9m

Debt

Nil

Listed Options

179.6m

\$0.06

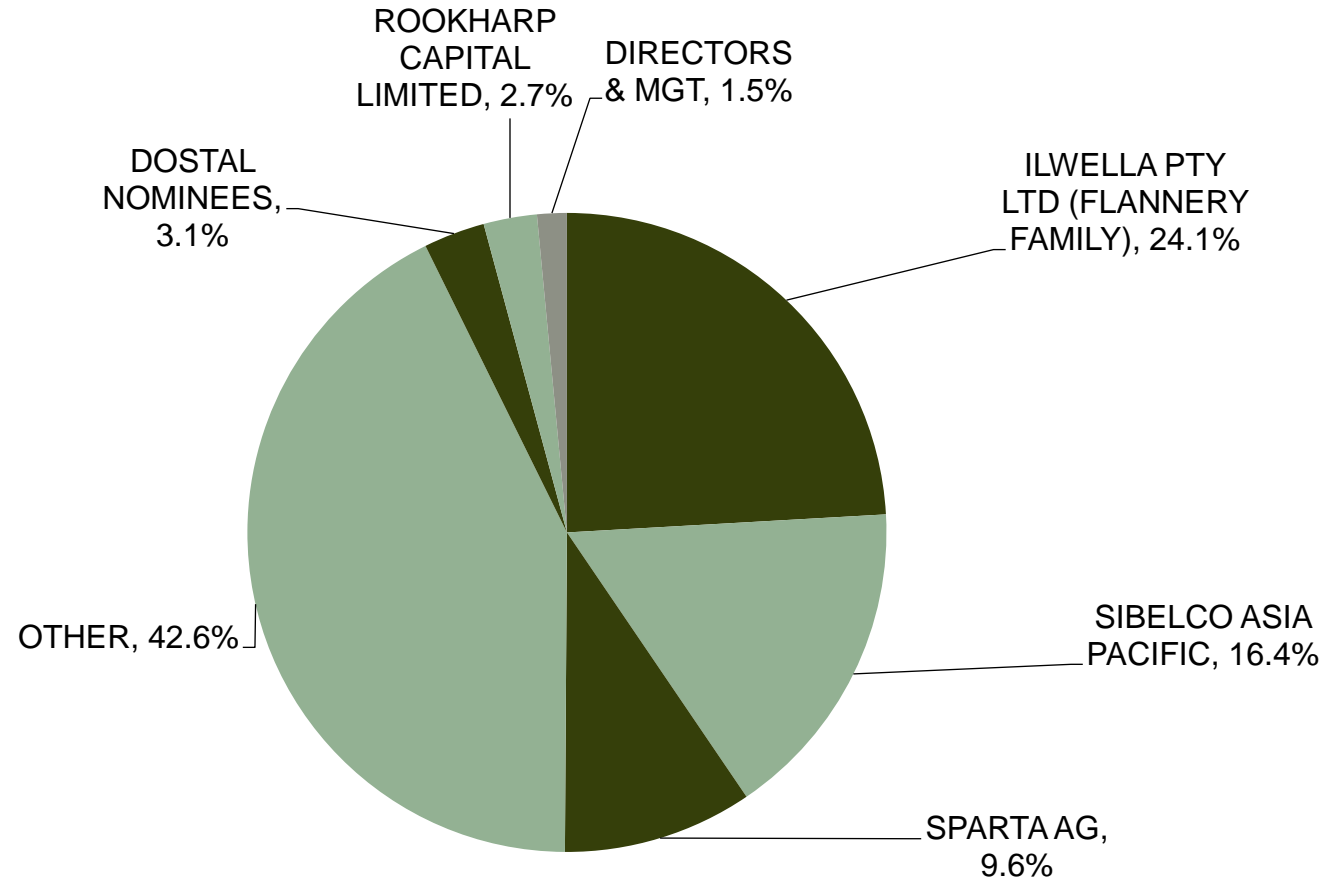
Unlisted Options

33.0m

Market Cap

\$27.8m

Top 20
shareholders
hold **66.0%**
of Register

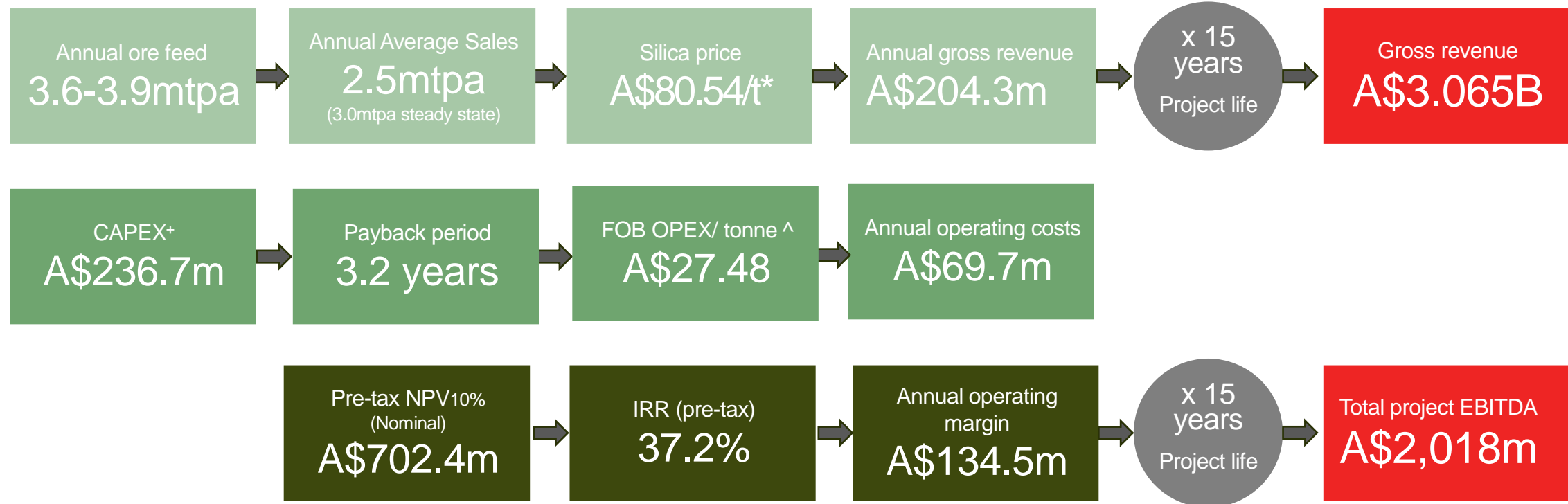


The opportunity

- > Silica sand is the key ingredient in glassmaking ~ 90% of high-quality glass will be manufactured in south-east and north Asia
 - Solar panels
 - BIPV and e-glass
 - Automotive glass
 - Display glass (TVs and smartphones)
 - Fibre optics & LED lighting
- > HPSS is a finite resource that is in limited supply and not readily accessible
- > Photo-voltaic glass is the key growth market, based on solar panel demand to meet future low emission targets
- > Why Cape Flattery silica sand?
 - Already a globally known product, preferred by the market
 - Aeolian or wind sand, is naturally sorted by particle size and weight, therefore requires minimal processing



Updated Definitive Feasibility Study



* The price assumption is for a high purity silica sand product ('low iron') suitable for solar PV cover glass manufacturing (FOB-Cape Flattery Port)

+ Capital development costs include a 10% contingency (\$21.5m)

^ FOB OPEX includes Qld Gov Royalty of \$0.90 per tonne; C1 OPEX excludes Qld Gov Royalty

3. All references are in unleveraged, mid-2025 Real AUD unless stated otherwise; See ASX Release 15 November 2023 "Cape Flattery Silica Updated DFS supports 3Mtpa saleable product"

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Planned CFS Project Operations

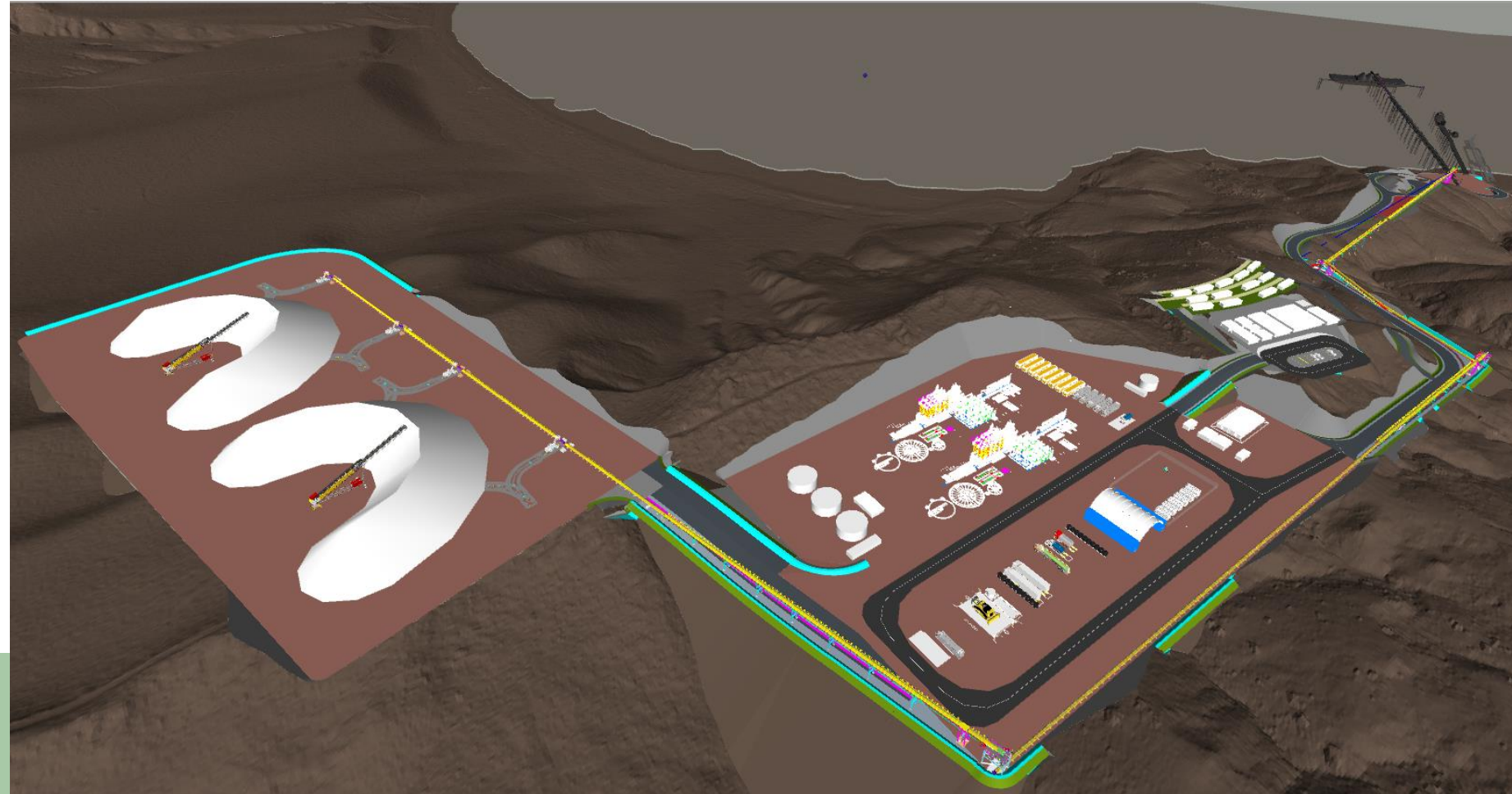


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The CFS MLA is small site in an elevated position.

Key site infrastructure includes:

- > Product stockpiles
- > Processing plants and pad
- > Conveyor
- > Jetty infrastructure facility (subject to government approvals)
- > Purpose-built accommodation facility.



Our Neighbourhood



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- > Remote operating area with a large resource of high purity silica sand (HPSS)
- > Metaphorically, it is the Bowen Basin of silica sand
- > Cape Flattery Silica Mines (CFSM) project was founded in 1967 and acquired by Mitsubishi in 1977 and is one of the world's largest silica sand mines
- > CFSM exports approximately 3Mtpa and most of this product is sold into China, Japan, South Korea, and Taiwan
 - > Responsible for 70-75% of Australian exports of HPSS since 2017
 - > Accounted for ~30% of the seaborne HPSS market in 2023
 - > The seaborne market grew ~40% YoY in 2023, but Australia lost market share due to Asian competitors approving projects faster
- > CFSM constructed a deep water jetty in 1987

Why didn't we choose the southern side of the Cape?



Transshipping

- > Weather & sea conditions
 - Wind and waves predominately from a south easterly direction
 - A transshipment facility built here is effectively in an active surf zone
 - A breakwater may be required to protect the jetty and barges from the sea conditions
 - More lost days due to weather and sea conditions
- > Commercial and operational dependencies on, and proximity to existing operations



Use existing wharf to load ships

- not available

Wharf extension and new ship-loader

- High capital cost not including tug fleet
- Constrained to loading smaller vessels
- Significant commercial and operational dependencies on existing operations

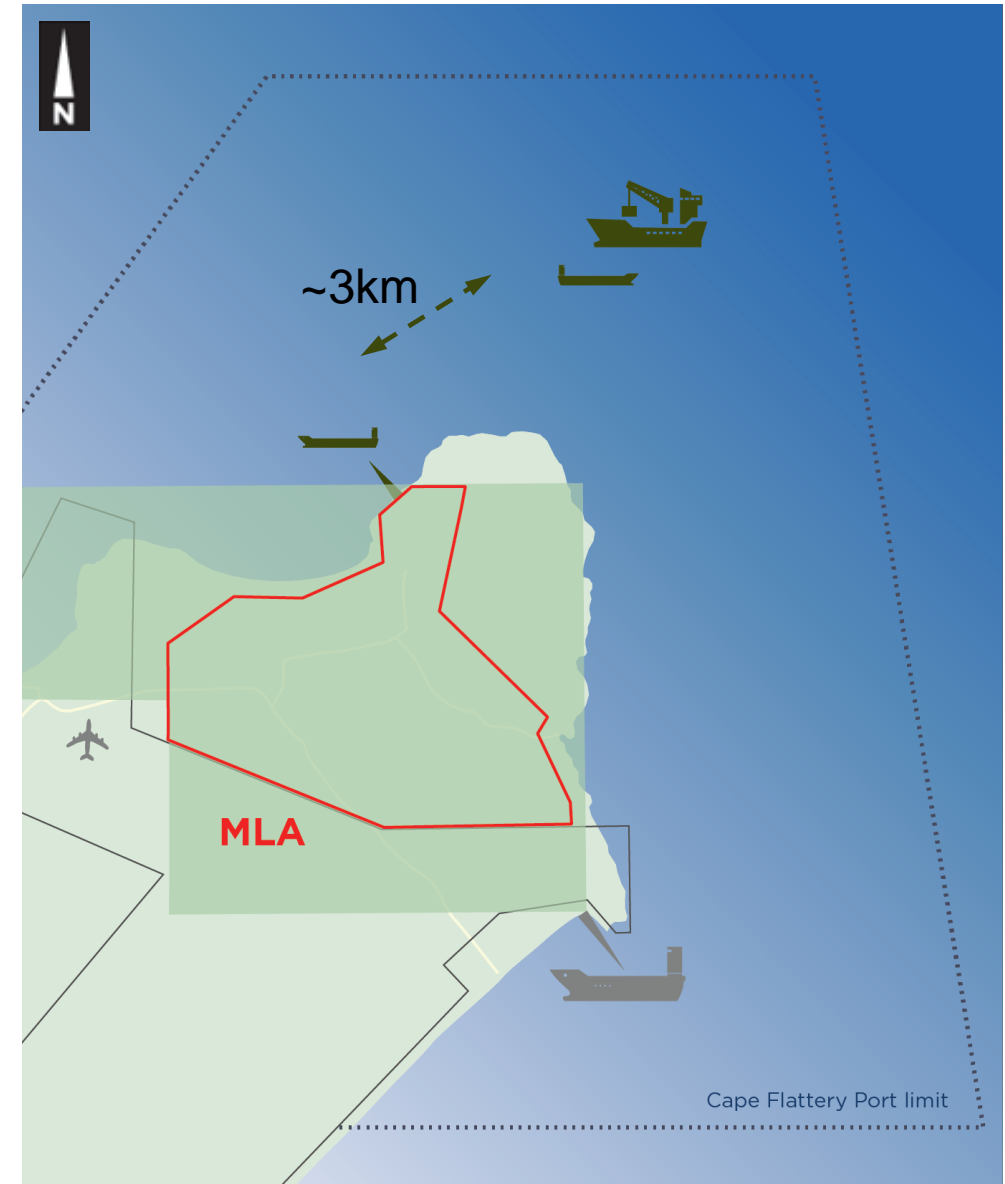


These are not the best options for the CFS project

Our Export Solution



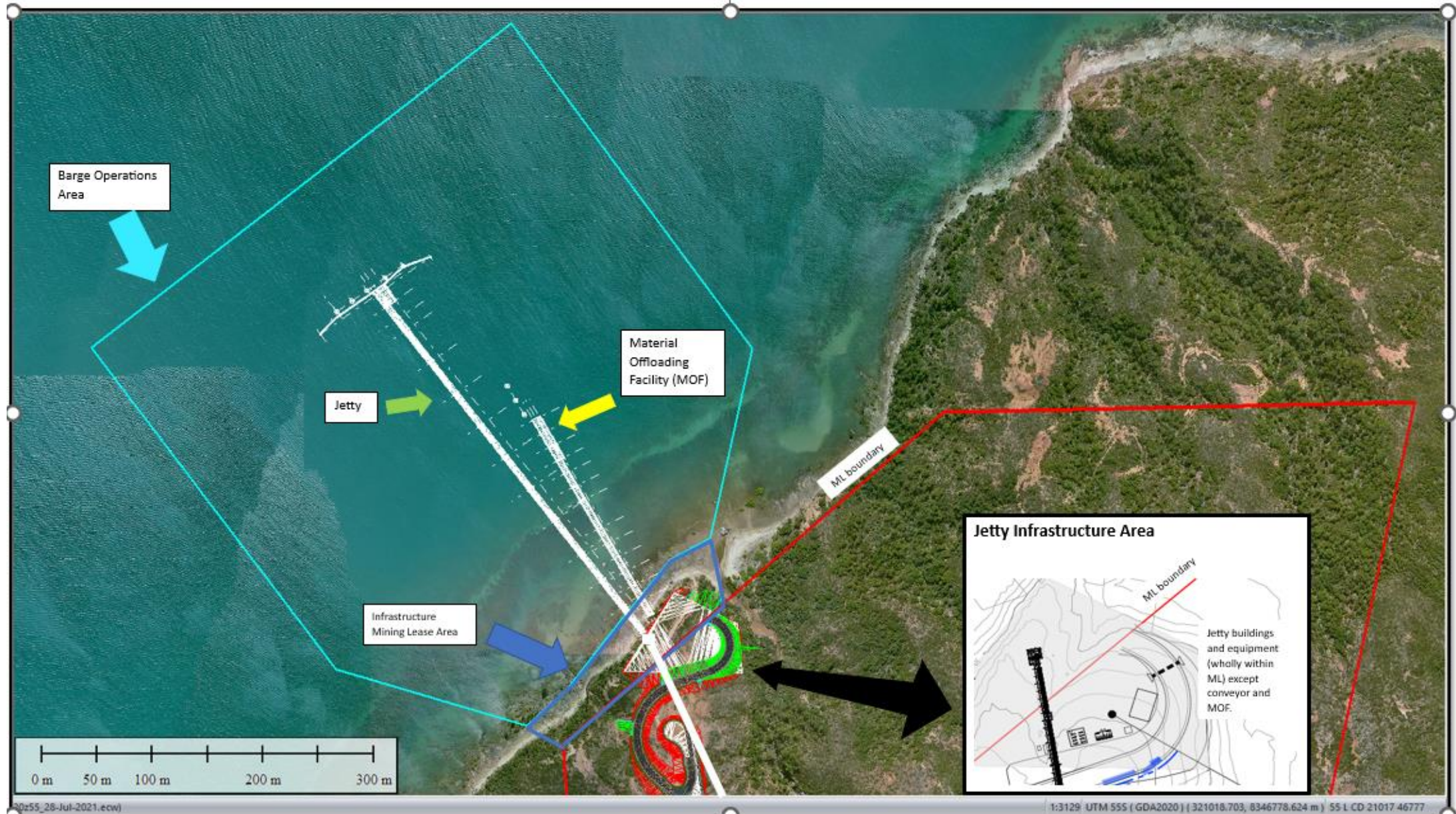
- > Transshipping:
 - A flexible, low capital and operating cost alternative to building a wharf and a ship-loader
 - Common and accepted practice in Australia and internationally
 - Ability to load Cape size vessels, unconstrained by wharf size (subject to regulatory approvals)
- > No dependencies on other miners in the area:
 - No commercial agreement required
 - Very little operational interaction
- > Transshipment vessel loading in an area sheltered from the main south easterly wind directions and wind generated swell will result in few weather delays and more available operating time
- > Minimum environmental impact to the Great Barrier Reef and surrounds
 - An extra ship per week (increases shipping through GBR 1%)
 - Jetty/MOF with piles, no rock armour and no requirement for a breakwater
 - ***“Almost all ships travel safely along the designated shipping routes with little, if any, impact.”*** (per GBRMP website)



CFS Jetty Loading Facility & Roll-on-Roll-off



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Traditional Landowner Negotiations



- > Three groups:
 - Hopevale Congress Aboriginal Corporation (Trustee Landowner)
 - Walmbaar Aboriginal Corporation (as agent for Dingaal clan – Traditional landowner)
 - Nguurruumungu clan – Traditional landowner
- > Negotiations have been held in respectful and friendly manner. Mediation process to begin shortly via National Native Title Tribunal (NNTT). Mediation sought to offer a disciplined process to bring the three TO parties together.
- > The two Traditional Landowners continually discuss planning for employment, training, apprenticeships and new business opportunities



CFS Project – the next 12 months



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- > Continue Environmental Impact Statement studies for Commonwealth and Queensland Government processes
- > Lodge Development Application for the construction of purpose built jetty
- > Finalise negotiations with Traditional Landowners and Trustee Landowner
- > Progress offtake discussions with potential customers in North Asia including value adding
- > Complete analysis of transshipping operations, progress approvals with Ports North and appoint preferred contractor
- > Continue to value add the project
- > Preparation for Final Investment Decision in 2025
- > Prepare for construction readiness

***Metallica is focused on
continuing to deliver value to its
shareholders***



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