Kariong Sand and Soil Supplies Facility

Independent Planning Commission Public Meeting

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Industry Assessments
9 November 2021

Assessment Process

- Environmental Planning & Assessment Act 1979
- State Significant Development
- Department of Planning, Industry & Environment
- Whole of Government Assessment
- Independent Planning Commission - Determination
  - > 50 Objections

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Proposed Project

- Kariong Sand and Soil Supplies Facility
- Resource recovery facility (RRF) with a waste throughput of up to 200,000 tonnes per annum (tpa)
- 10.8 hectare footprint
- $14,866,000 investment
- Operation – 7 am to 6 pm, Monday to Saturday
- 5 construction jobs
- 20 ongoing operational jobs
- Located within the Somersby Industrial Park

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Community Engagement

Public Exhibition 2019

- 432 submissions (98% object, 1% support, 1% comment)
- Advice from government agencies including
  - Central Coast Council
  - NSW Environment Protection Authority
- Site visit and discussion with Landowners – 28 February 2019

Community Engagement

Public Exhibition 2020

- 165 submissions (25% object, 73% support, 2% comment)
- Advice from government agencies including
  - Central Coast Council
  - NSW Environment Protection Authority
- Notified landowners and previous submitters about the exhibition period

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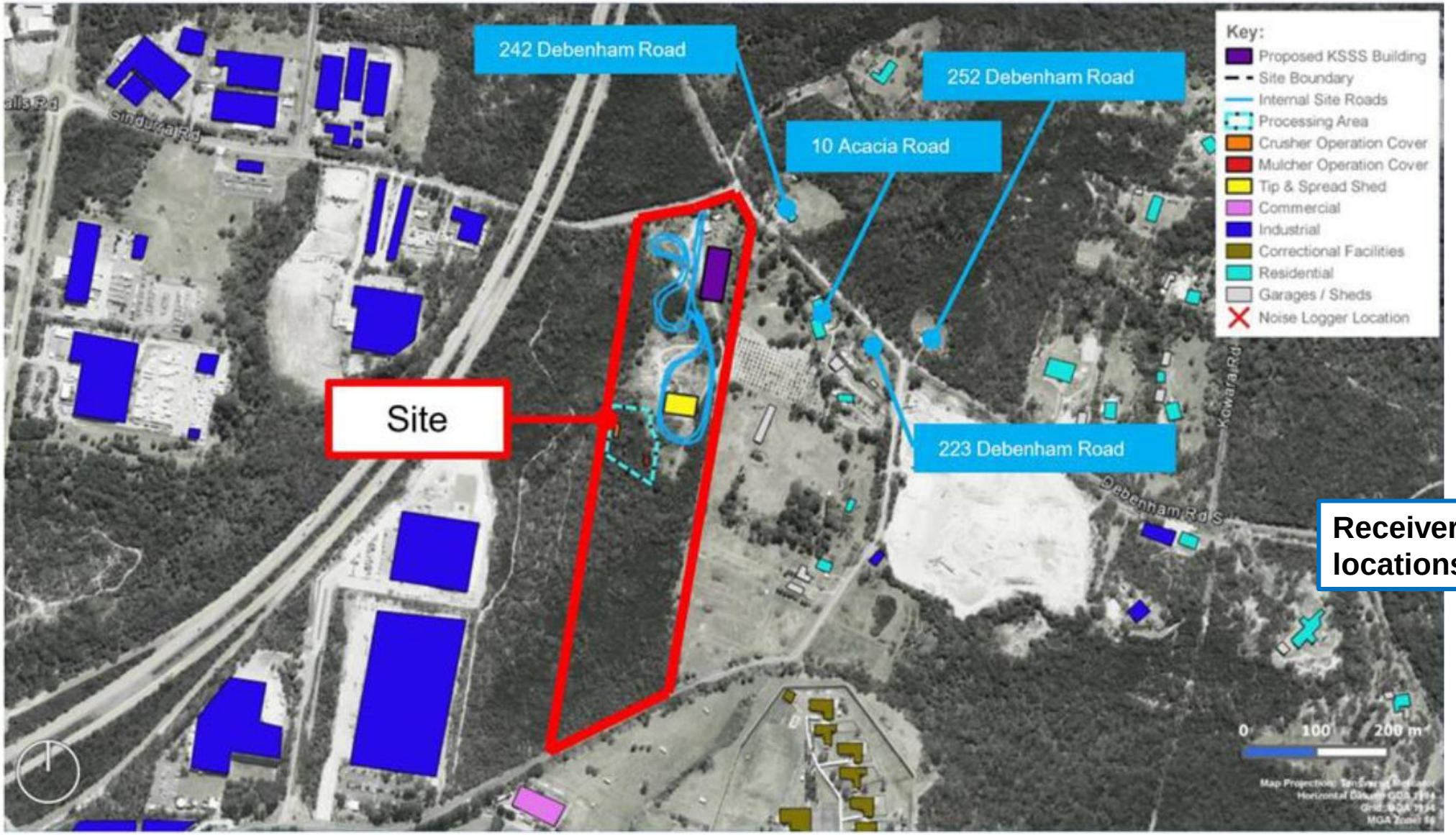
Key Changes

Component	Original Development	Amended Development
Staging of Annual Waste Throughput	One stage (only 200,000 tpa)	Three stages: • Stage 1: 100,000 tpa • Stage 2: 150,000 tpa • Stage 3: 200,000 tpa
Hours of Operation	24 hours, 7 days a week	7 am to 6 pm, Monday to Saturday only
Waste Receival and processing Areas	• Open-air waste receival, storage, processing and blending areas	• Waste receival enclosed in three-sided building • Crushing and mulching areas in enclosed buildings • Installation of a dust suppression and misting system
Site Access	Upgrade of Gindurra Road and the site access: • Construction of medians and lane marking to create new right turn lane leading to site	Additional measures constructed at the site access to prevent vehicles associated with the RRF using Debenham Road South: • Inbound and outbound lanes on the site driveway separated with a median • Erection of a No Right Turn sign at the site exit (applicable to all vehicles)

Key Issues

- Operational air quality
- Operational noise
- Operational traffic and access
- Water management
- Other issues:
    - Biodiversity, construction impacts, groundwater, Aboriginal cultural heritage, contamination, hazards, bushfire management, visual impacts


242 Debenham Road
252 Debenham Road
10 Acacia Road
223 Debenham Road
Site
Key:
Proposed KSSS Building
Site Boundary
Internal Site Roads
Processing Area
Crusher Operation Cover
Mulcher Operation Cover
Tip & Spread Shed
Commercial
Industrial
Correctional Facilities
Residential
Garages / Sheds
Noise Logger Location
Debenham Rd S
0
100
200 m
Receiver locations

Operational Air Quality

- The development would accept C&D Waste – potential air quality impacts from dust and particulate matter emissions
- Key emissions sources: concrete crushing, screening and grinding activities, vehicle movements, unloading of materials, wind erosion of storage areas, equipment exhaust
- Issues raised in submissions: potential air quality impacts from crushing concrete, silica dust generation
- Independent studies:
  - Community (TAS)
  - Applicant (ERM)
  - Department (EMM)

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Operational Air Quality

- Mitigation measures:
  - Limiting stockpile height, dust suppression outdoors (using water carts and misting systems), covering waste loads with a tarpaulin, undertaking continuous air quality monitoring, ceasing crushing, screening and grinding activities in windy conditions
- Main changes: full enclosure of certain activities, dust suppression and misting
- Meets criteria at all receivers at 200,000 tpa, EPA satisfied

Receiver	Max incremental (PM_{10})	Max incremental ($PM_{2.5}$)	Max Cumulative (PM_{10})	Max Cumulative ($PM_{2.5}$)[1]	Respirable Crystalline Silica (annual cumulative)
Rural Residential	22.6 µg/m^3	3.5 µg/m^3	42.9 µg/m^3	14.0 µg/m^3	0.8 µg/m^3 – 1 µg/m^3
Industrial	20.7 µg/m^3	3.1 µg/m^3	42.8 µg/m^3	13.6 µg/m^3	0.8 µg/m^3
Criteria	**N/A**	**N/A**	**50 µg/m^3**	**25 µg/m^3**	**3 µg/m^3**

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Operational Air Quality

- Strict conditions:
  - Onsite meteorological station
  - Operate to air quality criteria, limits and monitoring requirements from the relevant guidelines and the Environment Protection License (EPL)
  - Operational Air Quality Management Plan, including an air quality monitoring strategy
  - Compliance monitoring following Stages 1-3, plus actions to address air quality limit exceedances
  - Prior to increasing processing capacity from Stage 1 to Stage 2 and from Stage 2 to Stage 3 - verification of operational air impacts using actual operational air quality monitoring data
    - *Progression to Stage 2 and Stage 3 would be contingent on satisfactory verification of impacts of the previous stage.*

Noise

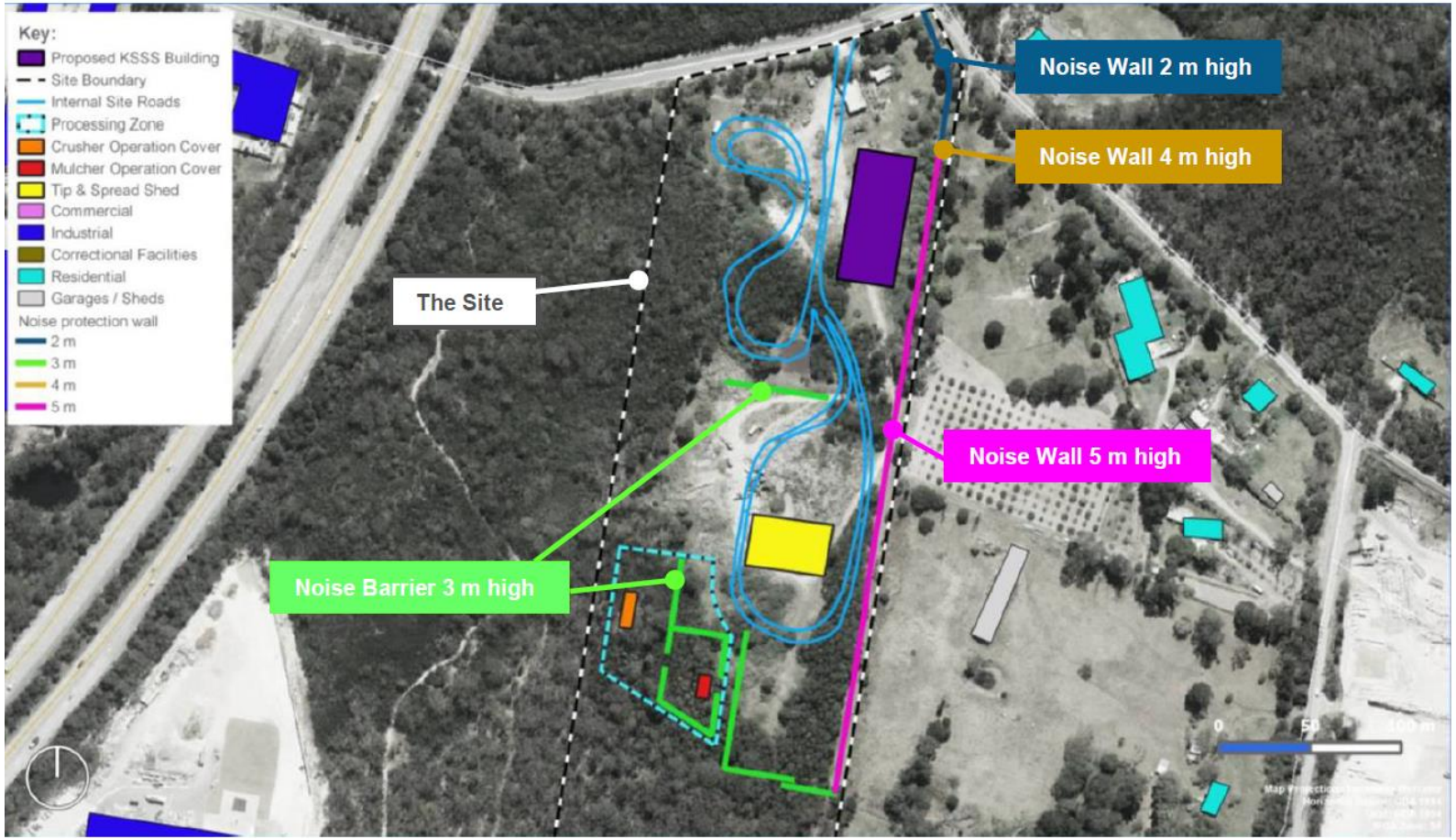
- Operational noise: heavy vehicles, front-end loaders, crushing and grinding works, plant and equipment
- Independent study (community): Muller Acoustic Consulting
- Main changes: full enclosure of certain activities, noise walls and barriers, no night-time operation
- Challenges:
  - Located close to residences
  - Equal to noise criteria at 242 Debenham Rd South
- Meets criteria at all receivers at 200,000 tpa, EPA satisfied
- Strict conditions

Noise

- Strict conditions:
  - Install the noise wall and barriers
  - Operate the development in compliance with operational noise limits
  - Operational Noise and Vibration Management Plan
  - Compliance monitoring following commissioning of Stages 1-3, plus actions to address any noise limit exceedances (Post Commissioning Noise Monitoring report)
  - Prior to increasing processing capacity from Stage 1 to Stage 2 and from Stage 2 to Stage 3 - verification of predicted operational noise impacts using actual operational noise quality monitoring data (Noise Modelling Report)
    - *Progression to Stage 2 and Stage 3 would be contingent on satisfactory verification of impacts of the previous stage*

Noise

Noise wall and noise barrier locations



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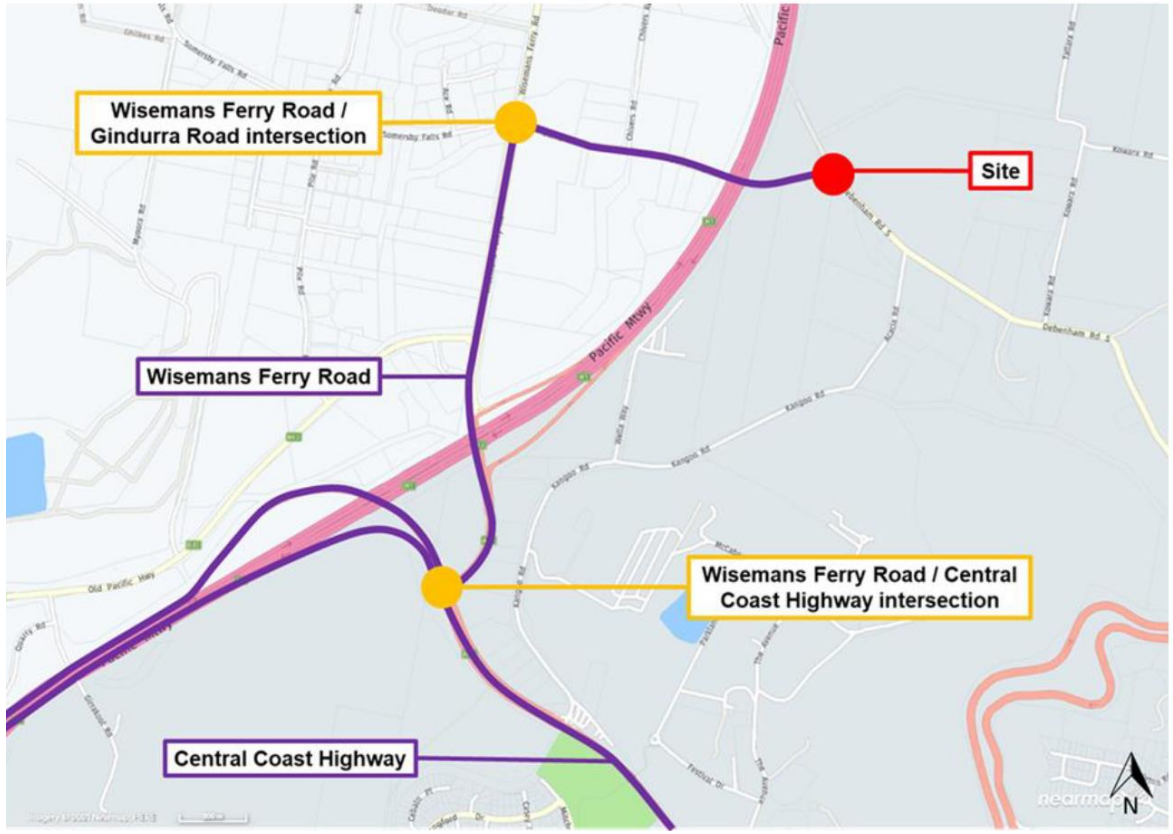
Traffic and Access

- Key concerns:
  - Impacts on residents on Debenham Road South and Kangoo Road
  - Queuing on Gindurra Road
- Independent study (community): Intersect Traffic
- Max of 23 movements per hour (12 in, 11 out)
- Key intersections not impacted
- Strict conditions

Vehicle Routes and Key Intersections



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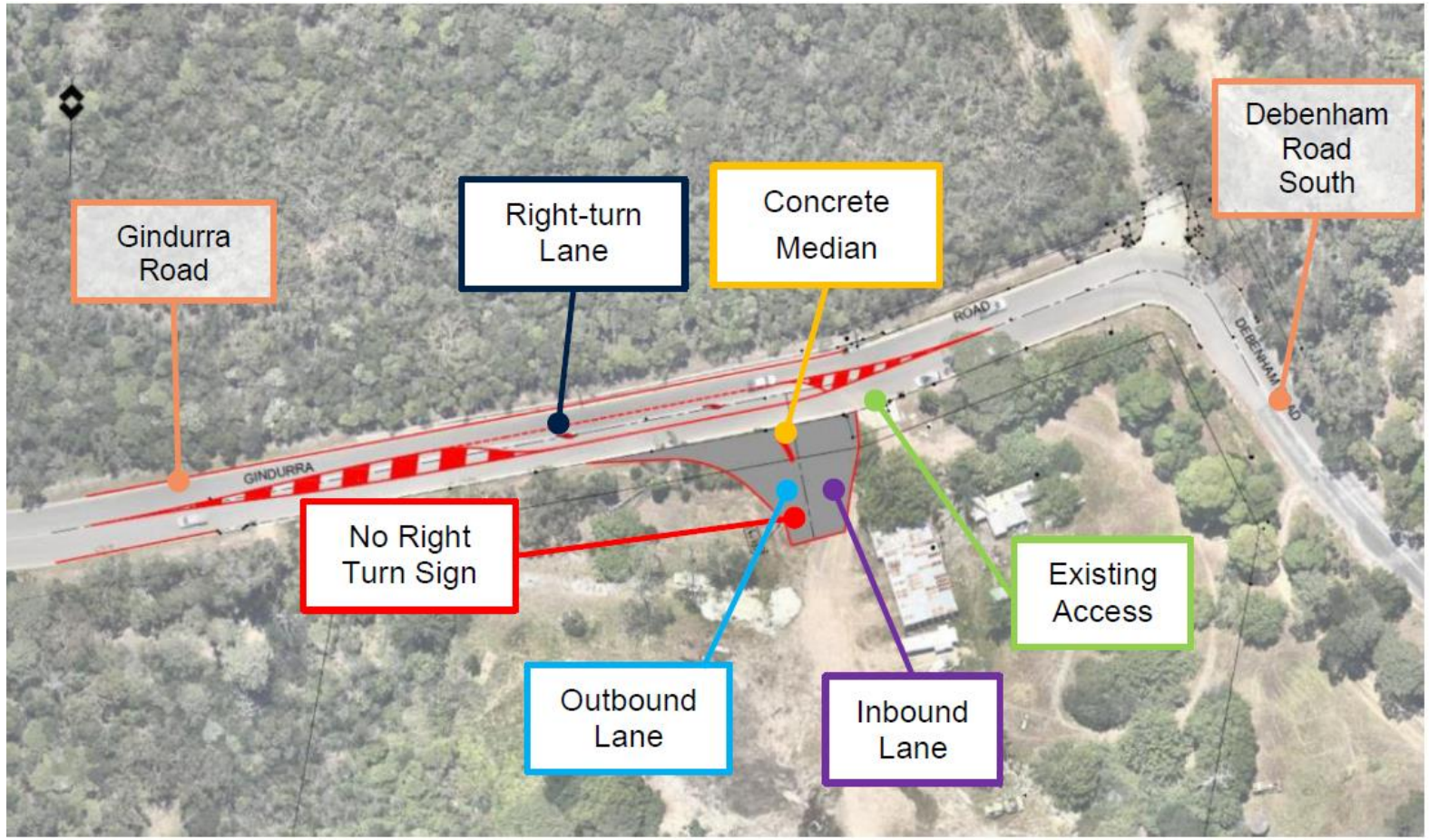
Site Access and Right Turn Lane



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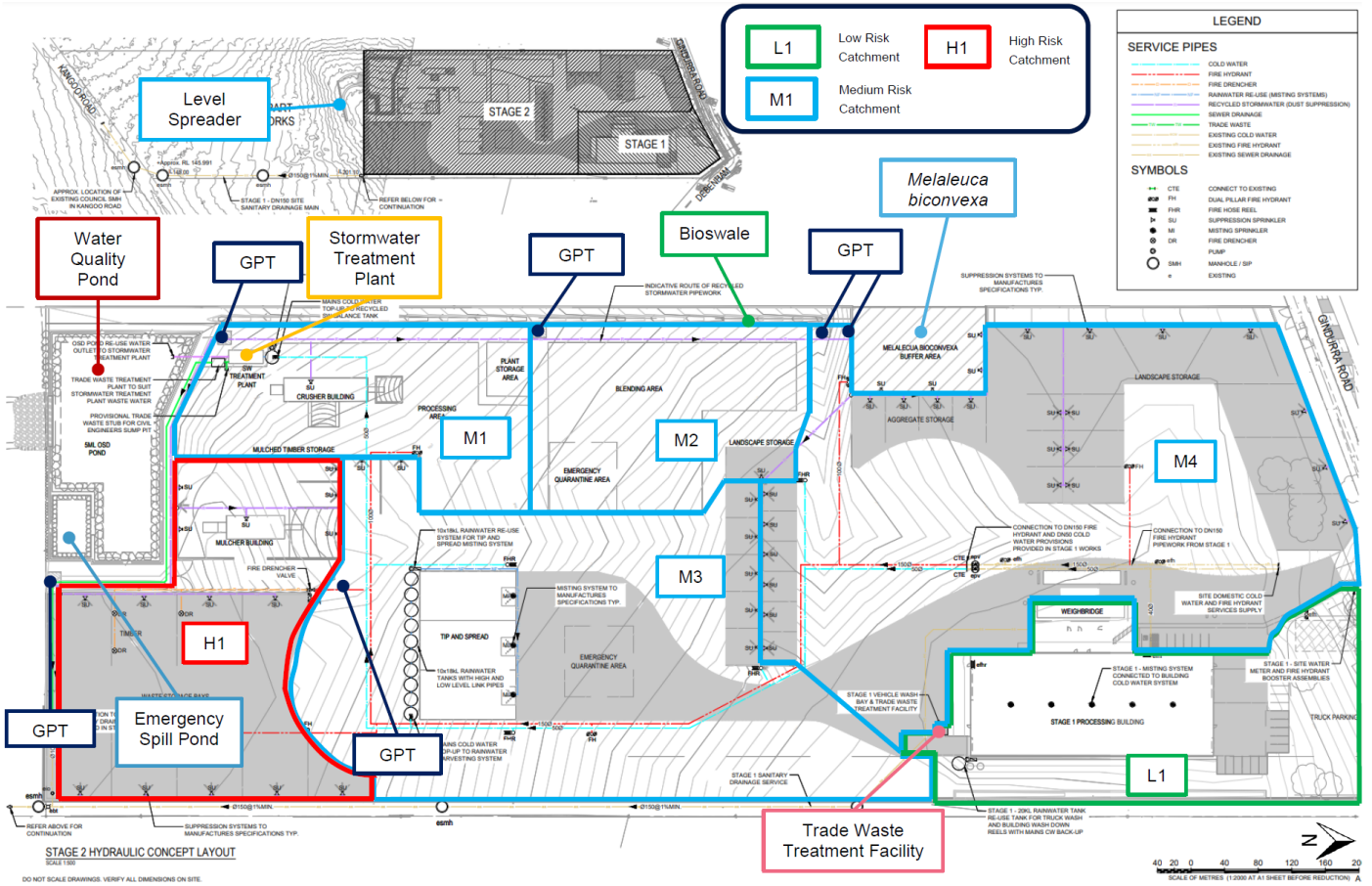
Traffic and Access

- Conditions:
  - Finalise the design of the right-turn treatment on Gindurra Road
  - Install road upgrades and site access infrastructure, including signage
  - Prepare an Operational Traffic Management Plan
    - specifying haul routes, access, onsite manoeuvring, and parking arrangements
  - Prior to increasing processing capacity from Stage 1 to Stage 2 and from Stage 2 to Stage 3 - verification of operational traffic numbers (Traffic Modelling Report), including actions required to manage additional impacts (in addition to the requirements of the OTMP)

Water Management

- Water Management System – collect, treat, recycle and reuse
- Contaminants:
  - TSS, P, N, heavy metals
- Three catchments types:
  - Low, medium, high risk
- Effectively reduce loads
  - Exceeds best practice
- Water for reuse is treated further
  - Meets human health criteria
- Effective in reducing discharge water velocity during rain events



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Water Management

- Conditions:
  - Install and operate the WMS in accordance with the conceptual design
  - Trade waste agreement with Council to discharge to Council's sewer
  - Operational Soil and Water Management Plan
  - Compliance monitoring following commissioning of Stages 1-3, plus actions to address any ANZECC Guideline criteria exceedances (Post Commissioning Water Monitoring report)
  - Prior to increasing processing capacity from Stage 1 to Stage 2 and from Stage 2 to Stage 3 - verification of water quality impact predictions using actual operational water monitoring data (Water Quality Modelling Report)

Other Impacts

- Biodiversity
  - retain 4.1 ha of native vegetation
  - clear 3.11 ha of native vegetation
  - required to offset this clearing in accordance with the *NSW Biodiversity Offsets Scheme*
- Construction: potential dust, noise and traffic impacts
- Groundwater
- Aboriginal Cultural Heritage
- Contamination
- Hazards
- Bushfire management
- Visual impact

Conditions

- *Strict Conditions* – developed in consultation with agencies and Council
  - Staging – no increase unless environmental criteria met and ensures progressive and controlled operational growth
  - Monitoring of impacts at each stage
  - Verification of predictions for air, noise, traffic, water following commissioning of Stage 1 and Stage 2
  - Management plans – to ensure effective management

- Listened to community concerns: -
  - Enclosure of key operational areas
  - Removed 24/7 operations, use of Debenham Road South
  - Noise walls

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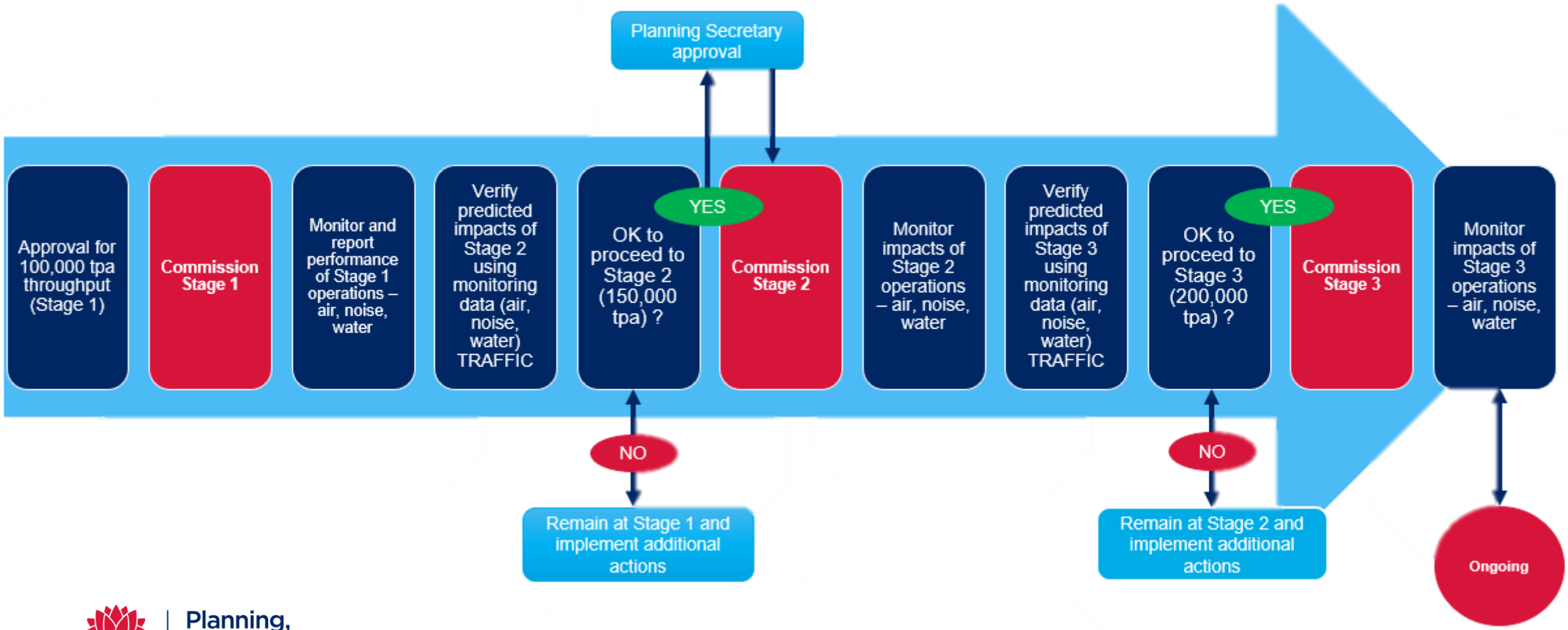
Conditions for Staging of Operations



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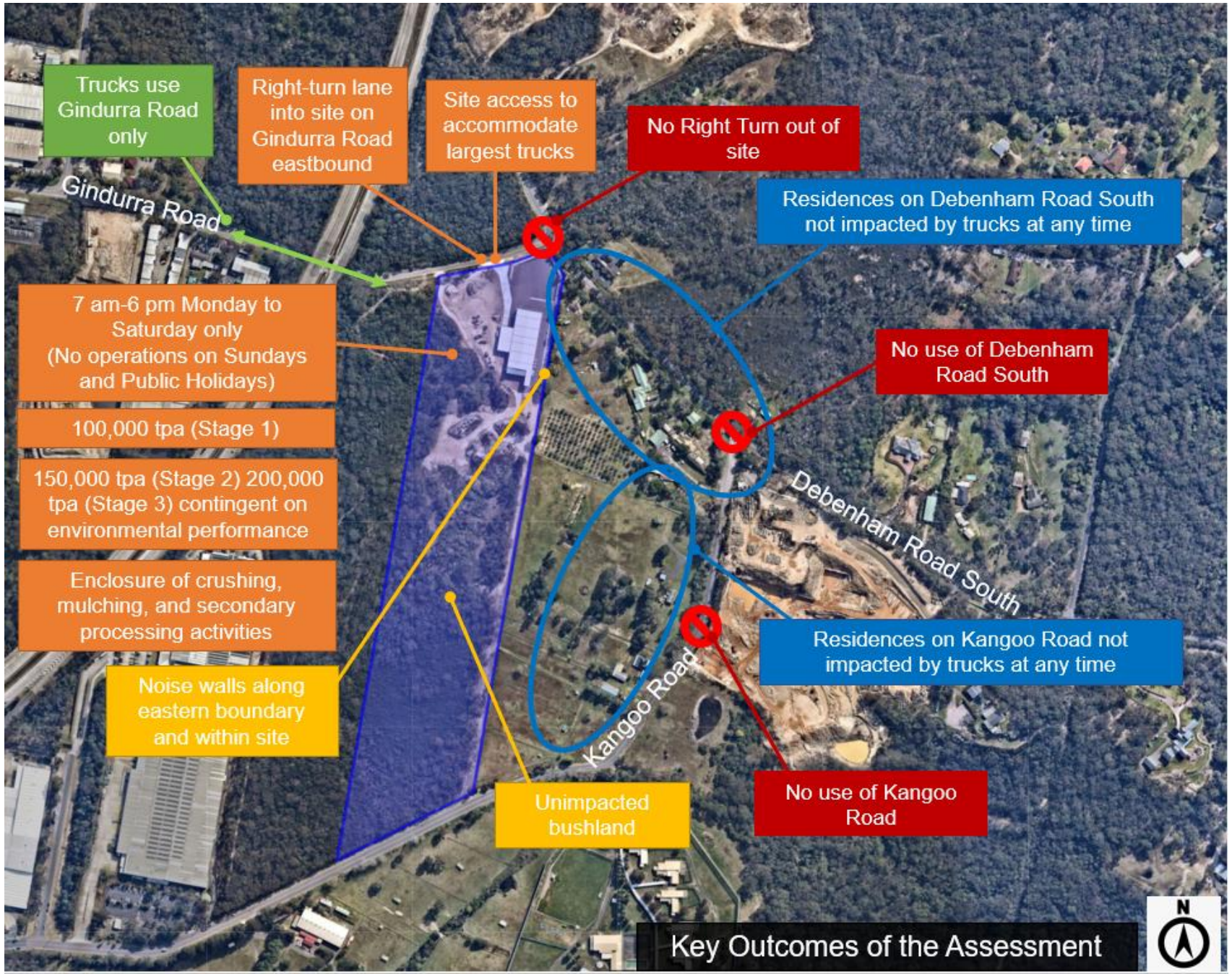
Trucks use Gindurra Road only
Right-turn lane into site on Gindurra Road eastbound
Site access to accommodate largest trucks
No Right Turn out of site
Gindurra Road
Residences on Debenham Road South not impacted by trucks at any time
7 am-6 pm Monday to Saturday only (No operations on Sundays and Public Holidays)
No use of Debenham Road South
100,000 tpa (Stage 1)
150,000 tpa (Stage 2) 200,000 tpa (Stage 3) contingent on environmental performance
Debenham Road South
Enclosure of crushing, mulching, and secondary processing activities
Residences on Kangoo Road not impacted by trucks at any time
Noise walls along eastern boundary and within site
Kangoo Road
Unimpacted bushland
No use of Kangoo Road
Key Outcomes of the Assessment
N

Benefits of the Project

- Up to 5 construction jobs
- Up to 20 ongoing operational jobs
- Almost $15 million in capital investment
- Divert up to 196,200 tpa of construction and demolition waste from landfill each year

Evaluation

- The Department has completed a comprehensive assessment of the project in accordance with the requirements of the EP&A Act.
- This has included community consultation and detailed advice from government agencies.
- The Department fully acknowledges that some members of the community remain strongly opposed to the project, and are concerned the project would result in a range of residual environmental impacts on the local community.
- However, the Department considers that the changes made to the project since the amendment of the EIS have significantly reduced the residual impacts of the project.

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Evaluation (continued)

- With these changes, and the implementation of the recommended conditions, the Department considers that the environmental impacts of the project can be managed to achieve acceptable outcomes.
- Overall, the Department considers that the project achieves an appropriate balance between providing critical waste infrastructure for the region and the associated benefits of the project, and minimising the potential impacts on surrounding land uses, local residents and the environment.
- It therefore considers that the project is approvable, subject to strict conditions.

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