

REVIEW OF ENVIRONMENTAL FACTORS (REF)

MOUNT VINCENT ROAD WASTE MANAGEMENT FACILITY



Prepared by EDM Ecological

On behalf of Maitland City Council

Document Details

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Background

EDM Ecological was engaged by Maitland City Council to prepare a Review of Environmental Factors (REF) for the proposed modified development consent (DA16/1805) for construction and operation of a Waste Transfer and Resource Recycling Facility at 109 and 110 Mt Vincent Road (Lot 2220 DP1095387 and Lot 201 DP520191). The modification seeks to amend the site layout to facilitate a new internal access road and minor changes to the layout of the recycling drop-off and pick-up area to improve operational efficiency and safety. The modification does not seek to increase the overall footprint, nor would the modification seek to change the intensification of the use, waste types or resource recovery processes. The modification would be pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This environmental assessment and determination of the proposal has been undertaken in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). For this proposal, Maitland City Council is both the public authority proponent (EP&A Act s5.3) and the determining authority (EP&A Act s5.1). The REF has been prepared in accordance with Clause 228 of the EP&A Regulation (2000).

Project Site

The proposed project site covers approximately 4ha and is located within the Maitland City Council waste management facility on Mount Vincent Road, East Maitland (**figure 1**). The site has General Residential (R1) zoning to the north and Rural Landscape (RU2) to the south. The nearest existing residential dwelling is approximately 400m to the north of the site. The Lower Hunter RFS Headquarters are located approximately 200m to the west. There is a history of mining at the location of the waste facility and in the immediate area. The site is heavily modified with landfill activities undertaken from 1993 until recently. There is moderately disturbed vegetation at the northern boundary of the site consisting of several mature native canopy trees, sparse mid-storey of native shrubs and climbers and ground layer of both native and introduced grasses and herbs. Access to the site is via the main access road into the Waste Facility on Mount Vincent Road.

Scope of works

Project plans have been provided by Maitland City Council in document 3931-1F (Maitland City Council 2022). The proposed works on site include:

- Erecting temporary site office
- Clearing of vegetation including the removal of several trees
- Relocating electrical power cables
- Demolishing existing concrete slabs
- Constructing drainage, new concrete slabs, new road pavement and kerb, median and kerb infill and litter fence.
- Landscaping, topsoil and spray seeding of batters
- Installation of signage and line marking of road
- Planting of offset trees at minimum 3:1 ratio

Note: Additional works including construction of a new boundary fence and related additional vegetation clearing in the north-western corner of the site was added to this REF on **4/5/2023**. This additional proposed vegetation clearing was inspected by Eco Logical Australia (ELA) and also reflected in the updated (version 2) Flora and Fauna Assessment provided by ELA (2022).

Timing

The works on site are scheduled to commence on 1 November 2022. It was initially anticipated that the project will take approximately 23 weeks to complete. However unsuitable weather conditions, the additional required works (as per above) and other delays have pushed the expected completion date back to August 2023.

Flora and fauna

As the proposed works will require the removal of vegetation at the northern boundary of the site including several mature trees, a Flora and Fauna Assessment was undertaken by Eco Logical Australia on behalf of Maitland City Council. No threatened flora species were identified within the project site during field surveys conducted by ELA. It was also determined that it is unlikely that the vegetation within the project site would support habitat for locally occurring threatened flora species (Eco Logical Australia 2022).

No threatened fauna species were observed within the project area during field surveys. Two hollow-bearing trees were recorded on site (**figure 2**). It is considered likely that these hollows are being occupied by arboreal mammals such as a Brush-tailed Possum, however further surveys would be required to confirm this (Eco Logical Australia 2022).

A total of 0.85ha (including the additional fence clearing area) of the Threatened Ecological Community (TEC) “Lower Hunter Spotted Gum – Ironbark Forest in the Sydney Basin Bioregion” will need to be removed as part of the proposed works on site. Based on the size of the area (0.85ha); that the project site does not occur on areas mapped on the Biodiversity Values Mapping; and that the impacts are not considered significant; assessment under the Biodiversity Offsets Scheme (BOS) under part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) is not required (Eco Logical Australia 2022).

Biodiversity Values Map

A search of the Biodiversity Values Map indicated that the proposed project will not have any impact on any areas of outstanding biodiversity value.

BioNet Atlas

As search of the BioNet Atlas of NSW Wildlife identified 65 threatened fauna species and 10 threatened flora species that have been recorded within a 5km radius of the project site. A test of significance was conducted by as per section 7.3 of the *Biodiversity Conservation Act 2016* (BC Act) and the proposal is not considered likely to have a significant impact on any of these species (Eco Logical Australia 2022).

Matters of National Environmental Significance

A search was conducted of the Department of Agriculture Water and Environment (DAWE) Protected Matters Search Tool for Matters of National Environmental Significance listed under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) within 5km radius of the project site. This identified 59 threatened species, 8 Threatened Ecological Communities and 7 migratory species of which the species or habitat are known, likely or may occur in the area. It was determined via the ‘Significant Impact Criteria’ that the proposed project would have no significant impact on any Matters of National Environmental Significance (Eco Logical Australia 2022).

Key Fish Habitat

A search of the Department of Primary Industries (DPI) Fisheries Spatial Data Portal indicated that there is no Key Fish Habitat within the project site. There is Key Fishery Habitat located approximately

730m to the east of the site known as Four Mile Creek and 350m west of the site which is unnamed. No threatened *Fisheries Management Act 1994* species are recorded in the project area.

Weeds

There are no significant priority weeds present within the project site, however a number of weed species have been identified. Weeds have the potential to spread during and post-construction works therefore weed hygiene protocols should be implemented as part of the Construction Environmental Management Plan (CEMP) for the project.

Heritage

The potential impact on Aboriginal and European heritage as a result of the proposed works was considered as part of this assessment.

Aboriginal Heritage

A search of the OEH Aboriginal Heritage Information Management System (AHIMS) register was undertaken on 2/11/2022. This search identified that there are 7 Aboriginal sites in or near the proposed project site. Further investigation identified the Aboriginal sites to be outside of the project site and unlikely to be impacted by the proposed works. Furthermore, the site is highly modified and therefore it is unlikely that unknown Aboriginal sites or artefacts would be disturbed as a result. This is consistent with the original DA Environmental Impact Statement undertaken by GHD on behalf of Maitland City Council (GHD 2016).

European Heritage

A search of the State Heritage Inventory and Maitland Local Environmental Plan 2011 was undertaken on 4/11/2022. No other historic heritage items occur at or near the proposed site.

Mine subsidence

A search of the NSW Planning Portal identified that the project site is located within a Mine Subsidence District. As part of the original DA Environmental Impact Statement undertaken by GHD on behalf of Maitland City Council, a mine subsidence impact assessment was presented in Appendix M with anticipated subsidence impacts and mitigation measures incorporated in the design of the original project. As part of this modified project sits within the area identified as 'Zone C' where "*No improvements are permitted without the Board's consideration of further geotechnical investigations*", it is therefore important that Maitland City Council gain approval from the Mine Subsidence Board before commencing the proposed works on site. Additionally, Council should ensure that all other previous design measures and conditions provided by the Mine Subsidence Board in relation to the original DA are adhered to.

Acid Sulfate Soils

A search of the NSW Planning Portal identified that the project site is mapped as Class 5 land in relation to Acid Sulfate Soils. This means there is a very low risk of acid sulfate soils occurring in the vicinity of the site.

Waste

Waste materials from the proposed project will likely include green waste, excess spoil, concrete and construction materials. Construction waste should be segregated as much as possible to allow for reuse or recycling where feasible. A plan for waste management should be included in the project Construction Environmental Management Plan (CEMP).

Water

There is a risk of sediment washing into nearby waterways and drains via stormwater during the proposed works. All stockpiled materials must be separated and bunded with sediment fencing or similar suitable sediment control. Stockpiles of loose materials such as soil should be covered when not being used to prevent rain and wind moving them. Drains and other high risk areas must be suitably protected with sediment barriers. If heavy rains are predicted, the work site should be assessed for any additional stormwater and sediment control measures or changes to the scheduled works. An erosion and sediment control plan must be included in the project Construction Environmental Management Plan (CEMP).

Noise

A noise assessment was undertaken by RAPT Consulting to consider the potential impacts of the operation and modification of the proposal. The results of the assessment indicate the proposal is predicted to comply with established project noise trigger levels. Based on the results and the information provided regarding the development, compliance with all noise goals is expected for the development on neighbouring residences and commercial operators. Therefore, from an acoustics perspective the findings suggest the proposal is acceptable (RAPT Consulting 2022).

Clause 228 assessment

Clause 228 of the EP& A Regulation sets out 16 factors that need to be considered when assessing environmental impact under Part 5 of the EP&A Act.

Table 1. Clause 228 Assessment

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
(a) Any environmental impact on a community?	Non-significant impact	<p>During the proposed works there may be a minor impact on the community by causing:</p> <ul style="list-style-type: none"> • A minor increase in dust. • A minor increase in noise, however will still be compliant with noise levels as per noise assessment conducted by RAPT Consulting (2022). • At times there may be a minor increase in vehicles entering and/or leaving the site via Mount Vincent Road. <p><u>Mitigation measures</u></p> <ul style="list-style-type: none"> • Works will only be carried out: <ul style="list-style-type: none"> ○ Monday to Friday 7am – 5pm. ○ Saturdays 8am – 1pm (adjacent residents will be given prior notification). ○ Sundays and Public Holidays – No work

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
		<ul style="list-style-type: none"> • Council and associated contractors will ensure that all plant and machinery are in good working condition with a recent service history and that all machinery is inspected prior to works commencing each day. • The adjoining residents will be notified prior to works commencing. • Dust will be suppressed by using a water cart or hose to keep exposed surfaces damp, where required. • During strong winds or when strong winds are predicted, works will be assessed and monitored to determine whether any changes are required. • If required, traffic control measures will be put in place for vehicles entering and leaving the site. • The specifications for the works require the provision of the safe continuous movement of road users in accordance with AS1742.3-2009.
<p>(b) Any transformation of a locality?</p>	<p>Non-significant impact</p>	<p>As per Flora and Fauna Assessment undertaken by Eco Logical Australia (2022), some tree removal is proposed as part of the clearing of approximately 0.85ha of vegetation. There is a potential risk that additional vegetation could be impacted during the works if not managed appropriately.</p> <p><u>Mitigation Measures</u></p> <ul style="list-style-type: none"> • Prior to the commencement of works, the extent of the project site (particularly vegetation clearing zone) should be clearly marked using flagging tape, bunting or similar. • Prior to the commencement of work, the individual trees identified for removal should be clearly marked.

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
		<ul style="list-style-type: none"> • Offset of tree species removed to be planted at a minimum of 3:1 ratio in a suitable location determined by Maitland City Council.
<p>(c) Any environmental impact on the ecosystem of the locality?</p>	<p>Non-significant impact</p>	<p>There may be a risk of sediment washing downstream during and following works. However, this is likely to be negligible providing that suitable sediment and erosion control plan is in place.</p> <p>No significant priority weed infestation has been identified at the site, however good weed hygiene practices should still be implemented.</p> <p>As per Flora and Fauna Assessment undertaken by Eco Logical Australia (2022), some tree removal is proposed as part of the clearing of approximately 0.85ha of vegetation.</p> <p><u>Mitigation measures</u></p> <ul style="list-style-type: none"> • Erosion and sediment control plan is required to be implemented on site as part of a Construction Environmental Management Plan (CEMP). • During heavy rain or when heavy rain is predicted, works should be assessed and monitored to determine whether any changes to works are required. • Weed hygiene procedures should be implemented on site as part of a Construction Environmental Management Plan (CEMP). • Prior to the commencement of works, the extent of the project site (particularly vegetation clearing zone) should be clearly marked using flagging tape, bunting or similar. No machinery or vehicles are to enter or disturb vegetation outside of the vegetation clearing zone. • Prior to the commencement of work, the individual trees identified for removal should be clearly marked. • Offset of tree species removed to be planted at a minimum of 3:1 ratio in a suitable

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
		location determined by Maitland City Council.
<p>(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p>	<p>Non-significant impact</p>	<p>There will be a minor temporary reduction of the aesthetics in the immediate locality of the site during the works.</p> <p><u>Mitigation measures</u></p> <ul style="list-style-type: none"> • Council and associated contractors will reduce the impact on aesthetics by minimising plant, equipment and materials left on site when works are not being undertaken.
<p>(e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p>	<p>Non-significant impact</p>	<p>A search of OEH Aboriginal Heritage Information Management System (AHIMS) register and further investigations of previous studies (GHD 2016) have determined that is unlikely that any Aboriginal sites or places will be impacted as a result of the proposed project. However, Council and associated contractors should still be aware of potential Aboriginal heritage items.</p> <p>A search was conducted of Council’s heritage listed places under the NSW Heritage Act 1977 and under Schedule 5 of the Local Environment Plan 2011. No known European heritage items were identified as occurring at or near the worksite. No further assessment is required in this regard.</p> <p><u>Mitigation Measures</u></p> <ul style="list-style-type: none"> • If a potential Aboriginal object is identified, all work must cease in the general vicinity and an archaeologist should be contacted to assess the object and advise on any further actions.
<p>(f) Any impact on the habitat of protected animals (within the meaning of the Biodiversity Conservation Act 2016)?</p>	<p>Non-significant impact</p>	<p>As per Flora and Fauna Assessment undertaken by Eco Logical Australia (2022), some tree removal is proposed as part of the clearing of approximately 0.85ha of vegetation. Two hollow-bearing trees (HBTs) have been identified on site and are likely to be occupied by arboreal mammals such as a Brush-tailed Possum.</p> <p>The site does not contain any areas listed as Key Fish Habitat under the Fisheries Management Act 1994.</p> <p><u>Mitigation Measures</u></p>

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
		<ul style="list-style-type: none"> • The two hollow-bearing trees (HBTs) should be retained if possible. The HBTs must be marked so that they are easily distinguished from the other trees to be removed. • A suitably qualified and experienced ecologist must be present to supervise the removal of the two hollow-bearing trees. • All stockpiled materials must be separated and bunded with sediment fencing or similar suitable sediment control. • Stockpiles of loose materials such as soil should be covered when not being used. • Drains and other high risk areas must be suitably protected with sediment barriers. • An erosion and sediment control plan must be included in the project Construction Environmental Management Plan (CEMP).
(g) Any endangering of any species of animal, plant or other form of life whether living on land in water or in the air?	Neutral	As per Flora and Fauna Assessment undertaken by Eco Logical Australia (2022), the proposed works are unlikely to have any significant impact on any species of animal, plant or other form of life.
(h) Any long-term effects on the environment?	Neutral	All environmental factors have been considered. No long-term effects on the environment are likely to occur as a result of this project.
(i) Any degradation of the quality of the environment?	Neutral	There will be no degradation of the quality of the environment as a result of these works. The site will continue to be used as a waste transfer facility.
(j) Any risk to the safety of the environment?	Non-significant impact	The proposed site is situated in a mine subsidence zone. Maitland City Council must gain approval from the Mine Subsidence Board before commencing the proposed work on site. Council must also ensure that all other previous design measures and conditions provided by the Board (as per Appendix M in the original Environmental Impact Statement (GHD 2016) are adhered to.

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
		<p><u>Mitigation Measures</u></p> <ul style="list-style-type: none"> • Works must not commence on site until approval is provided to Maitland City Council by the Mine Subsidence Board. • All previous design measures and conditions provided in Appendix M of the original Environmental Impact Statement by GHD (2016) must be adhered to by Council and associated contractors.
(k) Any reduction in the range of beneficial uses of the environment?	Neutral	No reduction of the range of uses of the environment will occur. The site will continue to be used as a waste transfer facility.
(l) Any pollution of the environment?	Neutral	No pollution of the environment will occur as a result of the works on site.
(m) Any environmental problems associated with the disposal of waste?	Non-significant impact	<p>The project will likely generate some waste materials including green waste, excess spoil and excess construction materials. Construction waste should be segregated as much as possible to allow for reuse or recycling where possible.</p> <p><u>Mitigation measures</u></p> <ul style="list-style-type: none"> • All waste materials must be segregated and suitably banded with sediment fencing according to industry standards. • A plan for waste management should be included in the project Construction Environmental Management Plan (CEMP).
(n) Any increased demand on resources (natural or otherwise) which are, or are likely to become, in short supply?	Neutral	This project will have no impact on resources that are likely to become in short supply.
(o) Any cumulative environmental effect with other existing or likely future activities?	Neutral	All environmental factors have been considered. No cumulative environmental effects on the environment are likely to occur as a result of this project.

Relevant Clause	Impact Assessment	Reason and Mitigation Measures
(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	Neutral	The site is not located in an area where coastal processes or hazards occur.

Summary of Mitigation Measures

The following list of mitigation measures is recommended as a result of the Environmental Assessment:

Prior to works commencing

- Works **must not commence** on site until approval is provided to Maitland City Council by the Mine Subsidence Board.
- All previous design measures and conditions provided in Appendix M of the original Environmental Impact Statement by GHD (2016) must be adhered to by Council and associated contractors.
- Prior to the commencement of works, the extent of the project site (particularly vegetation clearing zone) should be clearly marked using flagging tape, bunting or similar.
- Prior to the commencement of work, the individual trees identified for removal should be clearly marked.
- The two hollow-bearing trees (HBTs) must be marked so that they are easily distinguished from the other trees to be removed, and should be retained if possible.
- Erosion and sediment control plan is required to be implemented on site as part of a Construction Environmental Management Plan (CEMP).
- Drains and other high risk areas must be suitably protected with sediment barriers as per industry standards.
- All stockpiled materials must be segregated and suitably banded with sediment fencing according to industry standards.
- A plan for waste management should be included in the project Construction Environmental Management Plan (CEMP).
- Weed hygiene procedures should be implemented on site as part of a Construction Environmental Management Plan (CEMP).

During works

- Works will only be carried out Monday to Friday 7am – 4pm and Saturday 8am – 1pm (adjacent residents are to be given prior notification).
- Council and associated contractors will ensure that all plant and machinery are in good working condition with a recent service history and that all machinery is inspected prior to works commencing each day.
- If required, traffic control measures will be put in place for vehicles entering and leaving the site.
- The two hollow-bearing trees (HBTs) should be retained if possible. The HBTs must be marked so that they are easily distinguished from the other trees to be removed.
- A suitably qualified and experienced ecologist must be present to supervise the removal of the two hollow-bearing trees.
- No machinery or vehicles are to enter or disturb vegetation outside of the vegetation clearing zone.
- All waste and other stockpiled materials must be segregated and suitably banded with sediment fencing or similar according to industry standards.
- Stockpiles of loose materials such as soil should be covered when not being used.
- Dust will be suppressed by using a water cart or hose to keep exposed surfaces damp, where required.
- During strong winds/heavy rain or when strong winds/heavy rain are predicted, scheduled works will be assessed and monitored to determine whether any changes are required.
- Council and associated contractors will reduce the impact on aesthetics by minimising plant, equipment and materials left on site when works are not being undertaken.
- If a potential Aboriginal object is identified, all work must cease in the general vicinity and an archaeologist should be contacted to assess the object and advise on any further actions.
- Offset tree species to be planted at a minimum of 3:1 ratio in a suitable location determined by Maitland City Council.

Determination

This Review of Environmental Factors provides a true and fair review of the activity in relation to its likely effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the project and provides sufficient information to determine whether there is likely to be a significant impact on the environment as a result of the project.

I have considered all environmental impacts and mitigation measures to the best of my knowledge and have sought advice where required. The proposed works can proceed as planned providing the listed mitigation measures are in place.

Signed..........Date.....5/05/2023.....

Terry Bignell (EDM Ecological)

Reviewed and endorsed by

Signature:

Name:

Title:

Date:

Authorising Manager's approval

Signature:

Name:

Title:

Date:

References

Eco Logical Australia, 2022. Versions 1 and 2. *Mount Vincent Road Waste Facility*. Prepared for Maitland City Council.

GHD, 2016. *Mt Vincent Waste Management Centre Waste Transfer and Recycling Facility Environmental Impact Statement*. Prepared for Maitland City Council.

Maitland City Council, 2022. *3931-1F - Mount Vincent East Maitland Waste Management Facility Improvements*.

RAPT Consulting, 2022. *Noise Assessment – Mt Vincent Waste Facility Modification*. Prepared for Eco Logical Australia.

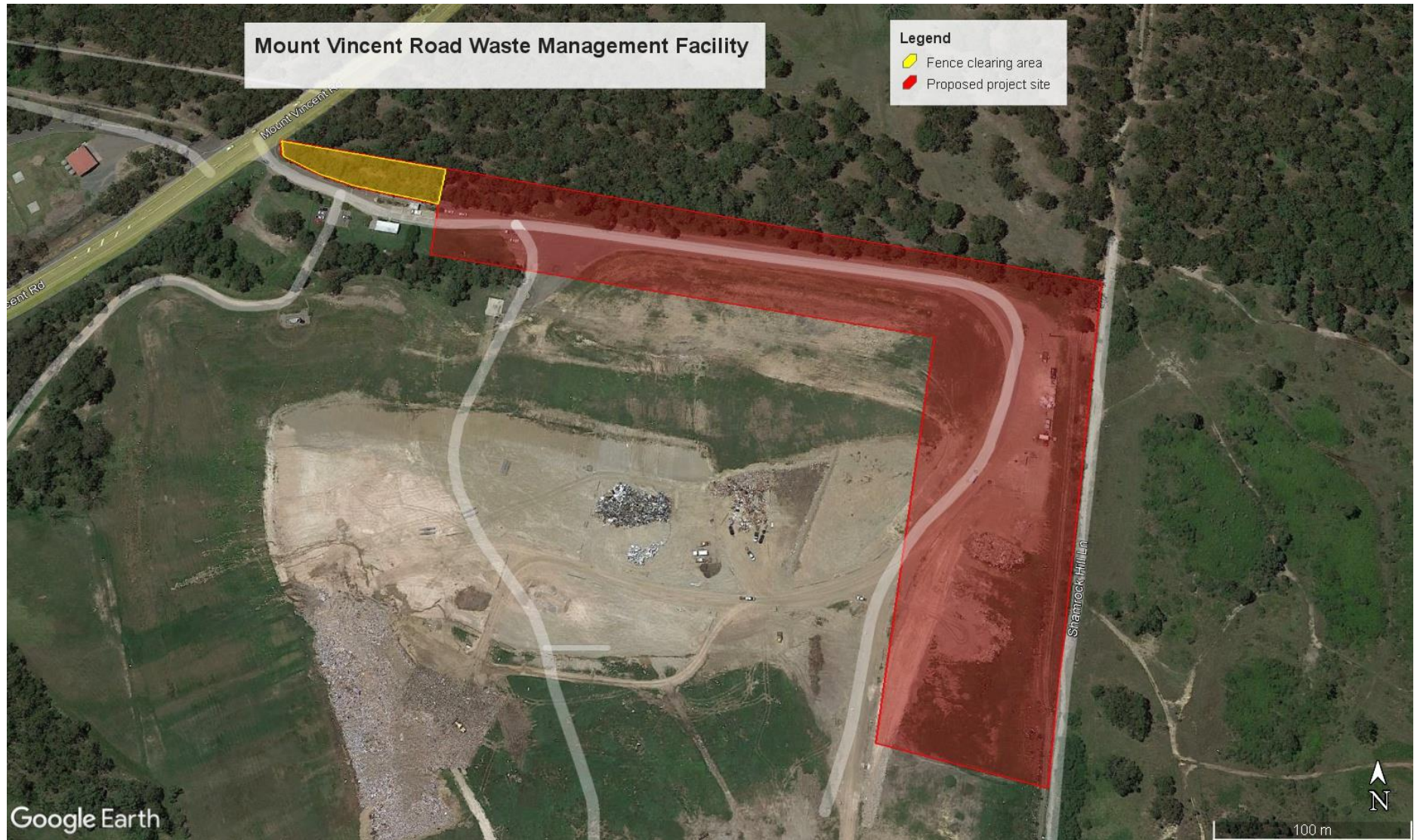


Figure 1. Mount Vincent Road Waste Facility Proposed Project Site.



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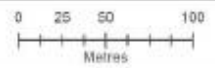
Survey Effort

- Study Area
- Lot Boundary
- Proposed Extension Area
- Survey Tracks (07/09/2022)
- Survey Tracks (06/04/2023)
- + Hollow Bearing Tree

- ▲ Log
- ⬠ Stick Nest
- Rapid Data Point

Plant Community Type (ELA, 2022)

- PCT 3443 - Lower Hunter Spotted Gum Scrubby Transition Forest



Datum/Projection:
GDA 1994 MGA Zone 56
Project: 3303-AW Date: 3/05/2023



Figure 2. Ecological survey map provided by Eco Logical (2022). Note 2 hollow bearing tree locations.