City of Kalamunda

Canning Road (SLK 5.83 – SLK 8.99)

Environmental Impact Assessment

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Acknowledgement of Country

Ngala kaaditj Noongar moort keyen k aadak nidja boodja.
Natural Area acknowledges the Traditional Owners of the lands on which we operate, and recognises their continuing connection to lands, waters and communities.

Disclaimer

System Certifications

Environmental management system registered to ISO 14001:2015
Quality management system registered to ISO 9001:2015
Occupational health and safety management system registered to ISO 45001:2018

Document Title	KAL-R Canning Road Environmental Impact Assessment
Location	City of Kalamunda/2024 06 049 Canning Road Env Assessment/Clearing Permit Documents/KAL-R Canning Road Enviornmental Impact Assessment.docx

Draft/Version No.	Date	Changes	Prepared by	Approved by	Status
D1	26/02/2025	New Document	ZS	JW/LI	Draft for client comment
V1	16/04/2025	Finalised		ZS	Released

Contents

1.0 Introduction

Natural Area Consulting Management Services (Natural Area) was contracted by the City of Kalamunda (the City) to undertake an environmental impact assessment of the proposed clearing area to upgrade a portion of Canning Road. The environmental impact assessment will assist in the preparation and the submission of relevant documentation to support a clearing permit application.

The proposed clearing area is within a public road reserve and includes approximately 3.72 ha along Canning Road in Carmel (SLK 5.83 – SLK 8.99). This portion of road is located approximately 225 m north of Welshpool Road East and approximately 180 m south of Glenisla Road (Map 1 to 4). The proposed project design is provided in Appendix 1.

1.1 Legislative Context

State and Federal environment-related laws impact how environmental values are governed in Western Australia. The following legislation and policies are relevant to this report.

***Biodiversity Conservation Act 2016* (WA)**

The *Biodiversity Conservation Act 2016* (WA) (BC Act) aims to protect and conserve biodiversity as well as to promote the ecologically sustainable use of biodiversity components in the State. The BC Act provides the statute relating to conservation and legal protection of flora, fauna, and ecological communities. The BC Act follows the principles of ecologically sustainable development, detailing that decision-making processes should effectively integrate long-term and short-term economic, environmental, social, and equity considerations.

***Environmental Protection Act 1986* (WA)**

The *Environmental Protection Act 1986* (WA) (EP Act) provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement, and management of the environment connected with the foregoing. The Environmental Protection Authority (EPA) is established under this act and provides a structured policy framework that is consistent with the EP Act. The EPA produces the guidelines and procedures associated with conducting environmental assessments in line with the EP Act.

***Environment Protection and Biodiversity Conservation Act 1999* (Cth)**

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) serves to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places. The primary objective of the EPBC Act is to promote the conservation of biodiversity and the sustainable use of natural resources while allowing for ecologically sustainable development. The EPBC Act allows for the creation of conservation agreements between the Australian government and individuals, communities, or organisations to support the conservation of biodiversity.

***Soil and Land Conservation Act 1945* (WA)**

The *Soil and Land Conservation Act 1945* (WA) serves to conserve soil and land resources, and to mitigate the impacts of erosion, salinity, and flooding. This Act outlines the mitigation and prevention of land

degradation, promoting soil conservation and land management and the administration of Land Conservation District Committees (LCDC).

2.0 Site Characteristics

2.1 Bush Forever

No bush forever sites are recorded within the proposed clearing area or directly adjacent to the proposed clearing area.

2.2 Ecological Linkage

The proposed clearing area intersects with ecological linkage 139 (Map 5) (Western Australian Local Government Association, 2004). This ecological linkage links Kalamunda National Park with link 138 and 140.

2.3 Environmentally Sensitive Areas

No environmentally sensitive areas are recorded within the proposed clearing are or directly adjacent to the proposed clearing area.

2.4 Conservation Areas / Reserves

No conservation areas or reserves are recorded within the proposed clearing area. The nearest Department of Biodiversity Conservation and Attractions (DBCA) legislated lands and waters is Korung National Park, located 40 metres east of the proposed clearing area and 100 metres south of the proposed clearing area (Map 5) (DBCA, 2024a). Four crown reserves are adjacent to the proposed clearing area including R 9311, R 27801, R 10601, and R 53447 (Landgate, 2025).

2.5 Flora and Vegetation

A total of 0.33 ha (9 %) of the proposed clearing area is native vegetation extent (Department of Primary Industries and Regional Development (DPIRD), 2023a). The proposed clearing area is within the vegetation complex Yarragil 1, the pre-European extent remaining is:

- 80.95 % within the Jarrah Forrest
- 72.01 % within the City of Kalamunda (Government of Western Australia, 2019).

A total of 187 flora species were identified within the area survey by Natural Area (2024), comprised of 74 (40 %) introduced (weeds) and 113 (60 %) native species. Natural Area (2024) determined the presence of three conservation significant flora species including *Grevillea olivacea* (Olive Grevillea), *Grevillea thelemanniana* (Spider Net Grevillea), and *Stylidium striatum* (Fan-leaved Triggerplant). *Grevillea olivacea* (Olive Grevillea) and *Stylidium striatum* (Fan-leaved Triggerplant) is listed as Priority 4 under the BC Act, and *Grevillea thelemanniana* (Spider Net Grevillea) is listed as Critically Endangered under the EPBC Act. *Grevillea olivacea* (Olive Grevillea), and *Grevillea thelemanniana* (Spider Net Grevillea) were determined to be cultivated landscape varieties and are not naturally occurring. Of the conservation significant flora species recorded only two *Grevillea olivacea* (Olive Grevillea) individuals are within the proposed clearing area. Conservation codes are provided in Appendix 2.

A total of three vegetation types are recorded within the proposed clearing area, none of the vegetation types correspond to a threatened or priority ecological community. Vegetation condition across the

proposed clearing area is predominantly completely degraded and degraded (67 %) with 33 % in a good or better condition (Table 1 and Map 6 to 8).

Table 1: The vegetation condition within the proposed clearing area

Vegetation Condition	Pristine	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	0.000	0.000	0.673	0.572	0.072	2.403	3.72
Area (%)	0	0	18	15	2	65	100

2.6 Fauna

A total of 16 fauna species were observed across the survey area from 13 families (Natural Area, 2024). One conservation significant species, the Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) was sighted within the survey boundary and foraging evidence recorded under 32 % of the trees.

The final design indicates that 48 potential habitat trees (> 500 mm DBH) are proposed to be cleared. Of these potential habitat trees only two contain hollows, one of the trees with a hollow recorded does not have the characteristics to be suitable for black cockatoos, the other tree (ID 51) does contain suitable characteristics for black cockatoo breeding. The location of the trees proposed to be cleared are provided in Maps 9 to 11.

The survey area provided a low fauna habitat value with the site adjacent to a sealed trafficable road (Canning Road) and a reduced middle and understorey vegetation values across portions of the site. The surrounding vegetation around the survey area is likely to provide more suitable habitat for fauna species.

2.7 Hydrology/Wetlands

No recorded hydrology or wetland sites intersects within the proposed clearing area. The proposed clearing area is within 20 metres to multiple use geomorphic wetlands (UFI 12360) (Map 12) (DBCA, 2024b), the recommended separation buffers for geomorphic wetlands are 10-50 m (Western Australian Planning Commission, 2005). The nearest RAMSAR wetland (Forrestdale & Thomsons Lakes) are located over 19 km from the proposed clearing area (DBCA, 2017). The nearest listed wetland in *A Directory of Important Wetlands in Australia* (ANCA, 1993), is Brixton Street Swamps located 7 km from the proposed clearing area. The proposed clearing area is within 50 metres of surface hydrology line Bickley Brook (Map 12) (Geoscience Australia, 2015).

Majority of the proposed clearing areas is noted to be L1 for flood risk (88 %) followed by M1 (12 %) (Map 13) (DPIRD, 2023b). L1 is where <3 % of map unit has a moderate to high flood risk and M1 indicates that 10-30 % of map unit has a moderate to high flood risk.

2.8 Soils and Land Capability

A total of three different soil types are recorded across the survey area: Dwellingup 2 phase, the Yarragil 1 phase and the Yarragil 4 phase (DPIRD, 2022).

The proposed clearing area has a land instability risk of L1 where <3 % of map unit has a moderate to high hazard (DPIRD, 2023c). The proposed clearing area is recorded to have a subsurface acidification susceptibility rating of H2 where >70 % of the map unit has a high susceptibility to subsurface acidification (DPIRD, 2023d). Regarding wind erosion risk the proposed clearing area predominantly has a risk rating of M1 (50 %) where 10-30 % of the map unit has a high to extreme wind erosion risk (Map 14) (DPIRD, 2023e). The remaining proposed clearing area has a wind erosion risk of L2 (12 %) and H2 (38 %). Where L2 refers to 3-10 % of map unit and H2 indicates that >70 % of map unit has a high to extreme wind erosion risk.

Of the proposed clearing area approximately 88 % has a salinity risk rating of L1 and approximately 12 % of L2 (Map 15) (DPIRD, 2023f). Where L1 refers to <3 % of the map unit has a moderate to high salinity risk or is presently saline and L2 refers to 3-10 % of the map unit has a moderate to high salinity risk or is presently saline.

3.0 Avoidance and Mitigation

The final project design avoids environmental values onsite where possible. Potential suitable habitat trees were avoided where the design of the road could suitably be redesigned without comprising the safety of the intended final use. One potential habitat tree for black cockatoo breeding is to be impacted by the proposed clearing (Tree ID 51), and one potential habitat tree, ID 60, determined to have suitable hollow characteristics for black cockatoo breeding (Natural Area, 2024), will be avoided in the final project design.

The final project design does not impact any naturally occurring priority flora species within the survey area. To ensure that the naturally occurring priority flora are not impacted during the proposed clearing their locations will be known by the workers onsite and flagged out to mitigate any potential direct or indirect impacts.

The final project design is 3.72 ha, of which 67 % (2.51 ha) is in a degraded or completely degraded condition, and 33 % (1.22 ha) is in a good or better condition.

To mitigate potential environmental impacts during the proposed clearing a Construction Environmental Management Plan will be developed by the City, including environmental impact mitigation measures such as weed control, dieback hygiene, dust suppression and tree protection during construction activities. This plan will form a condition of contract between the City and the Building Contractor. Clearing works are to be staged and are to be directional. All clearing is to be conducted toward adjacent native vegetation in a slow manner to allow fauna to move into the adjacent vegetation.

4.0 Assessment Against Clearing Principles

It was determined that the proposed clearing area is likely at variance with four of the clearing principles, A, B, G and I. It was determined the proposed clearing is unlikely to be at variance with six of the clearing principles, C, D, E, F, H, and J. The assessment against each clearing principle is provided in Table 2.

The proposed works is likely to be at variance with Principle A as it contains a high diversity of native flora species and approximately 1.22 ha of the proposed clearing area is in a good to better condition. Principle B is likely to be at variance as Red-tailed Black Cockatoos (*Calyptorhynchus banksii naso*), listed as Vulnerable under the EPBC Act, were observed on site during the field survey, the presence of suitable foraging habitat for black cockatoos and the removal of one habitat tree containing hollows suitable for black cockatoo breeding. Principle G is likely to be at variance as greater than 70 % of the map unit has a high susceptibility to subsurface acidification and a portion of the proposed clearing area has greater than 70 % of map unit has a high to extreme wind erosion risk. Principle I is likely to be at variance as greater than 70 % of the map unit has a high susceptibility to subsurface acidification.

Table 2: Native vegetation clearing principles and assessment

Clearing Principle		Comment
A	Native vegetation should not be cleared if it comprises a high level of biological diversity.	The proposed area is likely to be at variance with this principle: ▪ A total of 187 flora species were identified within the surveyed areas, comprised of 74 (40 %) introduced (weeds) and 113 (60 %) native species. ▪ A total of two *Grevillea olivacea* listed as Priority 4 under the BC Act are to be cleared. It was determined that these individuals are likely a cultivated landscape variety and are not a naturally occurring population. ▪ The proposed clearing area is primarily in completely degraded condition with 2.403 ha recorded, and 1.245 ha recorded in a good or better condition. ▪ The clearing will be undertaken across three vegetation types. ▪ The proposed clearing area will be undertaken across three different soil types. ▪ Does not occur within an environmentally sensitive area. ▪ Does not occur within a bush forever site. ▪ The proposed clearing area intersects with ecological linkage 139. This ecological linkage links Kalamunda National Park with link 138 and 140.
B	Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	The proposed area is likely to be at variance with this principle: ▪ A total of 16 fauna species were opportunistically observed during the field surveys. ▪ Red-tailed Black Cockatoos (*Calyptorhynchus banksii naso*), listed as Vulnerable under the EPBC Act, were observed on site during the field survey. ▪ Of the 48 potential habitat trees (> 500mm DBH) proposed to be cleared two contain hollows with one containing a hollow with characteristics to be suitable for black cockatoos. ▪ Foraging evidence was recorded across the site, with evidence of feeding recorded underneath 32 % of the potential habitat trees. ▪ Fauna refuge was present across the site; however, due to the proximity to trafficable areas the vegetation adjacent to the proposed clearing area is likely to provide more suitable habitat. ▪ The proposed clearing area intersects with ecological linkage 139. This ecological linkage links Kalamunda National Park with link 138 and 140.

Clearing Principle		Comment
C	Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	The proposed area is unlikely to be at variance with this principle: ▪ A total of two *Grevillea olivacea* listed as Priority 4 under the BC Act are to be cleared. It was determined that these individuals are likely a cultivated landscape variety and are not a naturally occurring population. ▪ The proposed clearing area intersects with ecological linkage 139. This ecological linkage links Kalamunda National Park with link 138 and 140. No threatened or priority flora were recorded within the proposed clearing area that intersects with the known ecological linkage. ▪ One conservation significant flora species identified to potentially occur within the survey area, does not have a recorded flowering period during the field survey (*Pimelea rara*, Summer Pimelea). This species is a perennial shrub for which other characteristics would be present during the field surveys to enable identification to a minimum of genus level (Natural Area, 2024).
D	Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.	The following is unlikely to be at variance with this principle: ▪ No threatened or priority ecological communities were recorded within the survey area. No threatened or priority ecological communities are known to occur within the adjacent vegetation to the proposed clearing area.
E	Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	The following is unlikely to be at variance with this principle: ▪ A total of 0.33 ha (9 %) of the proposed clearing area is native vegetation extent. ▪ The proposed area is within the vegetation complex Yarragil 1, the pre-European extent remaining is: – 80.95 % within the Jarrah Forrest – 72.01 % within the City of Kalamunda (Government of Western Australia, 2019). ▪ Unlikely to create further degrees of fragmentation as the clearing is to occur within existing shoulders of the road reserves and will not increase edge effects.
F	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	The following is unlikely to be at variance with this principle: ▪ The proposed clearing area is within 20 metres to a multiple use geomorphic wetland (UFI 12360), the recommended separation buffers for geomorphic wetlands are 10-50 m. ▪ No wetlands are recorded within the proposed clearing area. The nearest RAMSAR wetland, Forrestdale & Thomsons Lakes, are located over 19 km from the proposed clearing area.

Clearing Principle		Comment
		▪ No wetlands listed under *a Directory of Important Wetlands of Australia* (ANCA, 1993) are recorded within the proposed clearing area. The nearest listed wetland is Brixton Street Swamps located 7 km from the proposed clearing area. ▪ No wild rivers are recorded to intersect with the project area. ▪ The survey area does not intersect with any surface hydrology lines, the proposed clearing area is within 50 metres of surface hydrology line Bickley Brook.
G	Native Vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The following is likely to be at variance with this principle: ▪ <3 % of map unit has a moderate to high hazard of land instability risk. ▪ Majority of the proposed clearing area is M1 for wind erosion risk, followed by L2 and H2, where: – L2: 3-10 % of map unit has a high to extreme wind erosion risk. – M1: 10-30 % of map unit has a high to extreme wind erosion risk. – H2: >70 % of map unit has a high to extreme wind erosion risk. ▪ >70 % of the map unit has a high susceptibility to subsurface acidification. ▪ Majority of the proposed clearing area is L1 for salinity risk, followed by L2, where: – L1: <3 % of map unit has a moderate to high salinity risk or is presently saline. – L2: 3-10 % of map unit has a moderate to high salinity risk or is presently saline.
H	Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	The following is unlikely to be at variance with this principle: ▪ The proposed clearing area does not intersect with any DBCA Legislated lands and Waters. ▪ The nearest DBCA legislated lands and waters is Korung National Park, located 40 metres east of the proposed clearing area and 100 metres south of the proposed clearing area. ▪ Four crown reserves are adjacent to the proposed clearing area including R 9311, R 27801, R 10601, and R 53447. ▪ The proposed clearing area intersects with ecological linkage 139. This ecological linkage links Kalamunda National Park with link 138 and 140. No threatened or priority flora were recorded within the proposed clearing area that intersects with the known ecological linkage.

Clearing Principle		Comment
I	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	The following is likely to be at variance with this principle: ▪ Majority of the proposed clearing area is L1 for salinity risk, followed by L2, where: – L1: <3 % of map unit has a moderate to high salinity risk or is presently saline. – L2: 3-10 % of map unit has a moderate to high salinity risk or is presently saline. ▪ >70 % of the map unit has a high susceptibility to subsurface acidification.
J	Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	The following is unlikely to be at variance with this principle: ▪ Majority of the proposed clearing areas is L1 for flood risk followed by M1, where: – L1: <3 % of map unit has a moderate to high flood risk. – M1: 10-30 % of map unit has a moderate to high flood risk. ▪ A total of 48 mature trees are to be removed; however, 63 mature trees are to be retained within the road shoulder.

5.0 References

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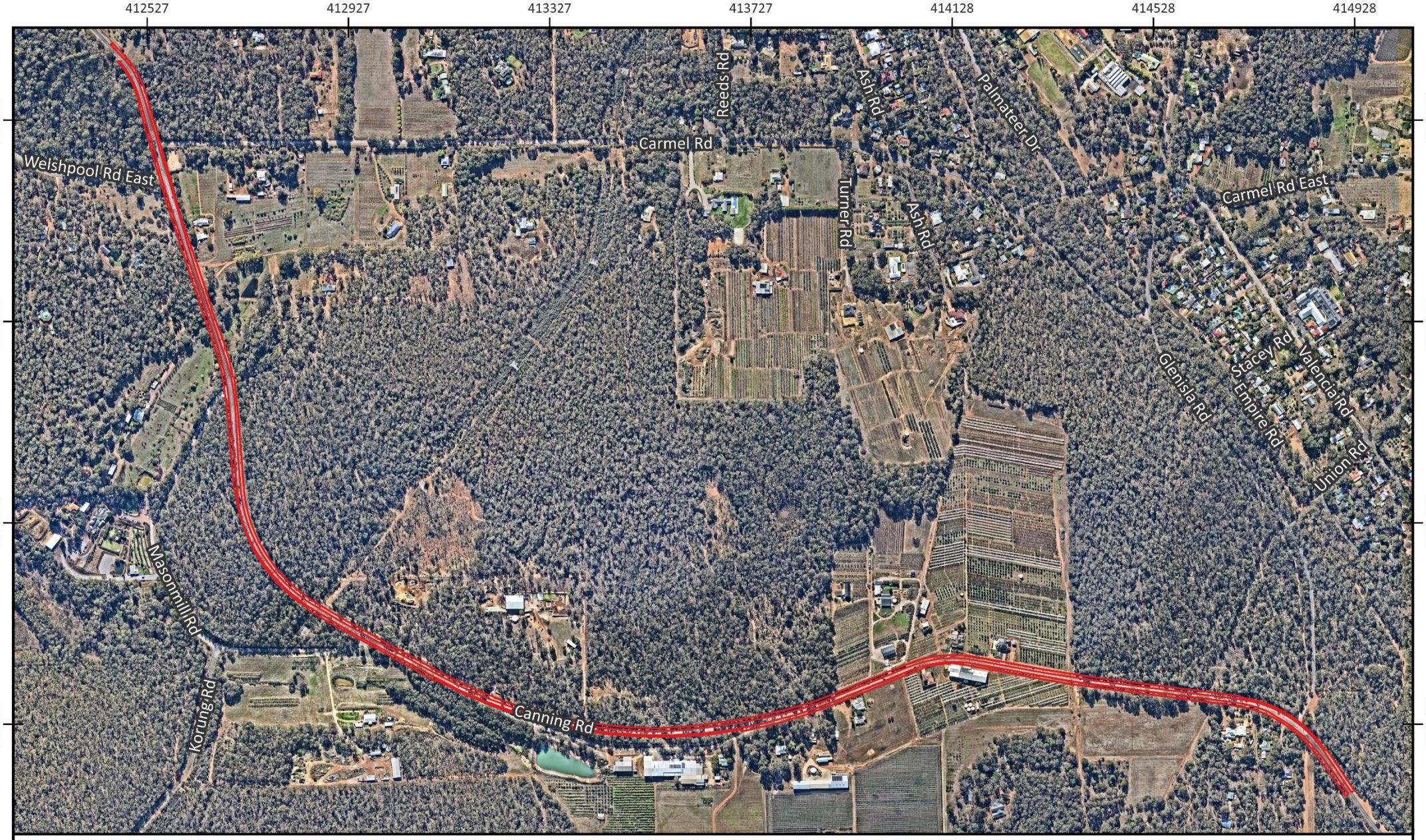
6.0 Maps



Map 1:

Proposed Clearing Area (SLK 5.83 - SLK 8.99)

Carmel, Western Australia

Legend

Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	24/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 10000

0 100 200 m

N

Map 2:

Proposed Clearing Area

Canning Road, Carmel

Legend

Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	24/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

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Map 3:

Proposed Clearing Area

Canning Road, Carmel

Legend

Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	24/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

N

Map 4:

Proposed Clearing Area

Canning Road, Carmel

Legend

Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	24/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

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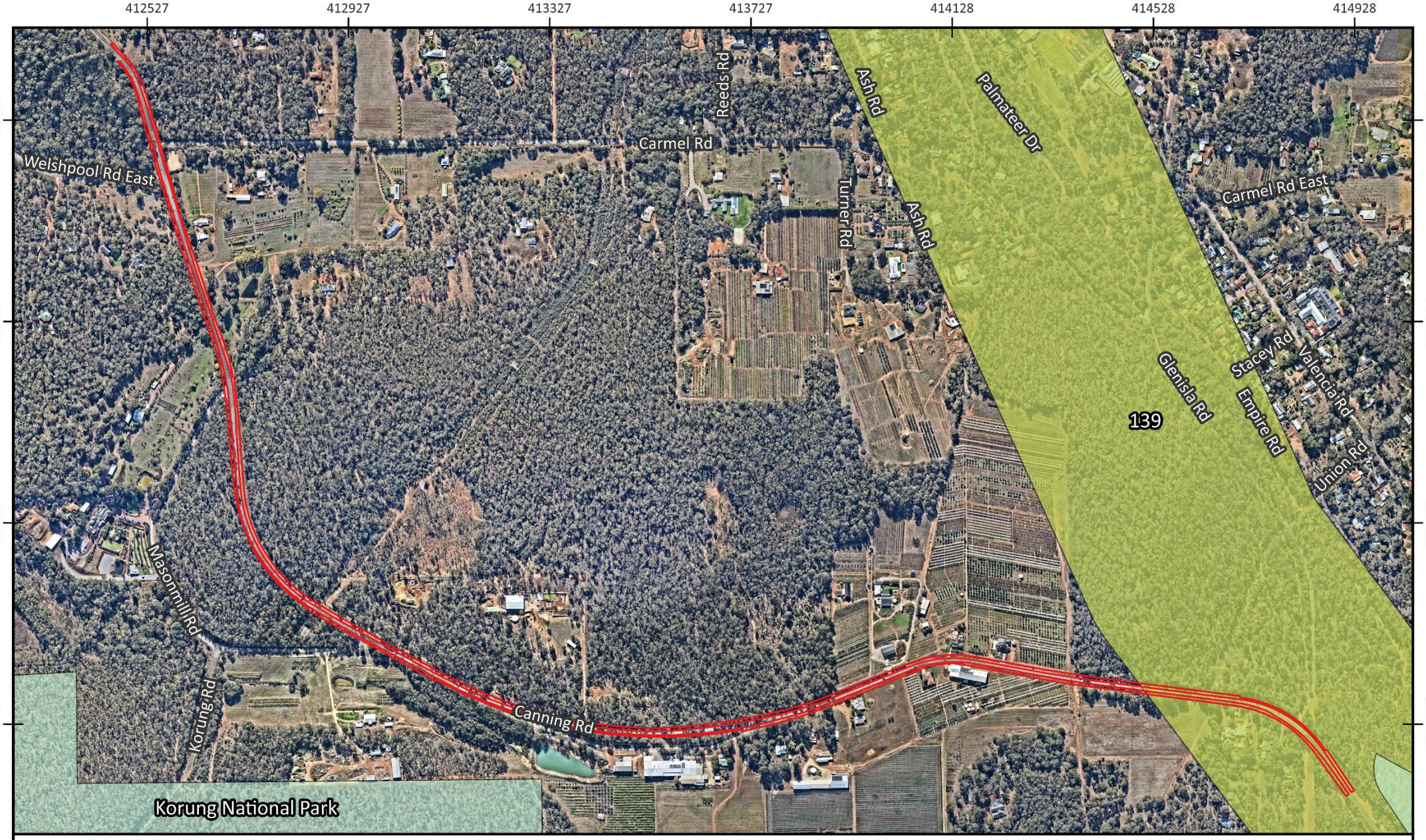

Map 5:

Ecological Linkages and Conservation Reserves

Carmel, Western Australia

Legend

- Regional Ecological Linkages
- DBCA Legislated Lands and Waters
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	24/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 10000

0 100 200 m

N

Map 6:

Vegetation Condition of Proposed Clearing Area

Canning Road, Carmel

Legend

- Very Good
- Good
- Degraded
- Completely Degraded
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

N

Map 7:

Vegetation Condition of Proposed Clearing Area

Canning Road, Carmel

Legend

- Very Good
- Good
- Completely Degraded
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
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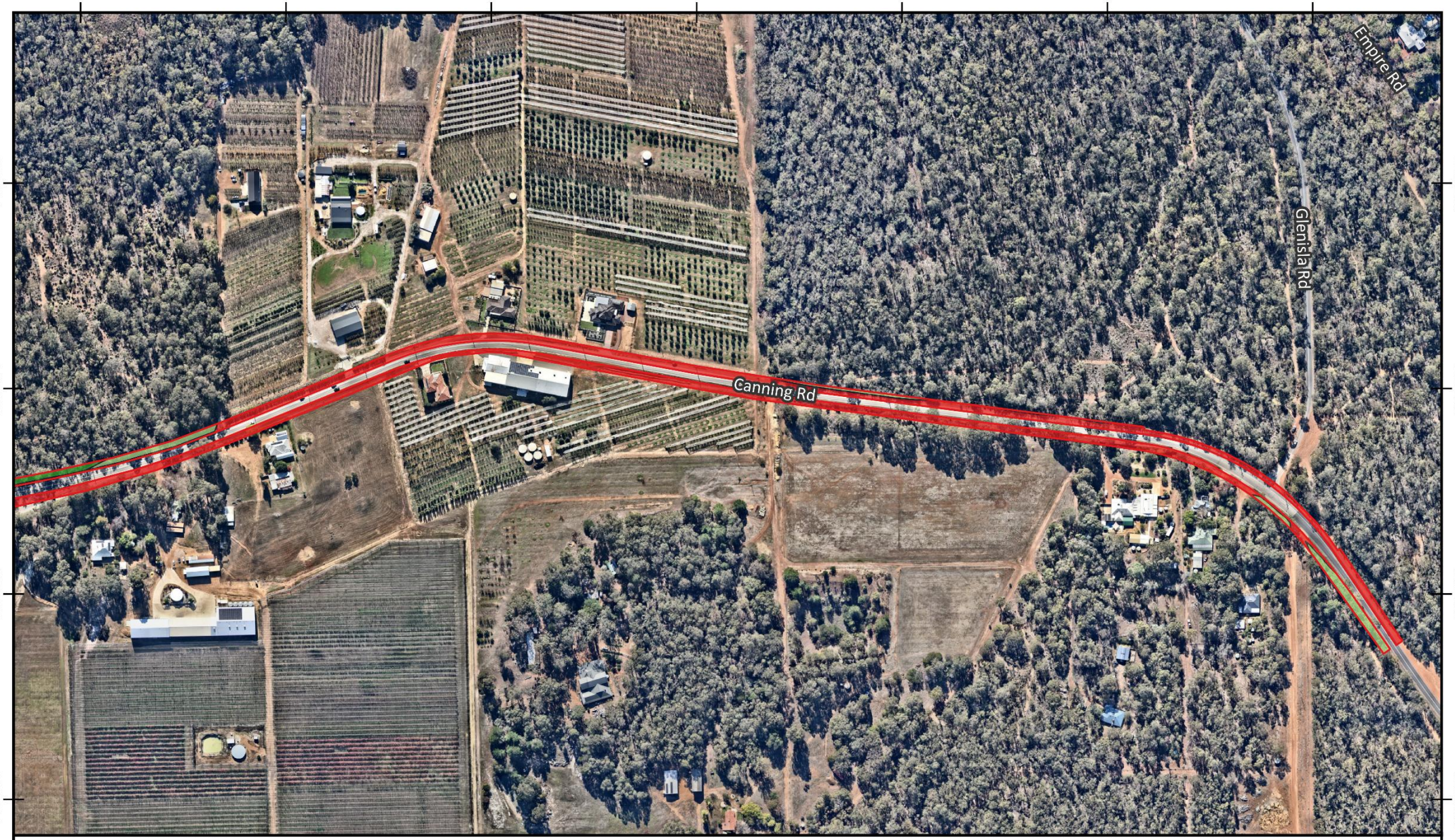

Map 8:

Vegetation Condition of Proposed Clearing Area

Canning Road, Carmel

Legend

- Very Good
- Good
- Completely Degraded
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

N

Map 9:

Potential Habitat Trees within the Proposed Clearing Area

Canning Road, Carmel

Legend

- No Hollows Present
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

N

Map 10:

Potential Habitat Trees within the Proposed Clearing Area

Canning Road, Carmel

Legend

- No Hollows Present
- Hollows Present
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 4500

0 50 100 m

N

Map 11:

Potential Habitat Trees within the Proposed Clearing Area

Canning Road, Carmel

Legend

- No Hollows Present
- Hollows Present
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
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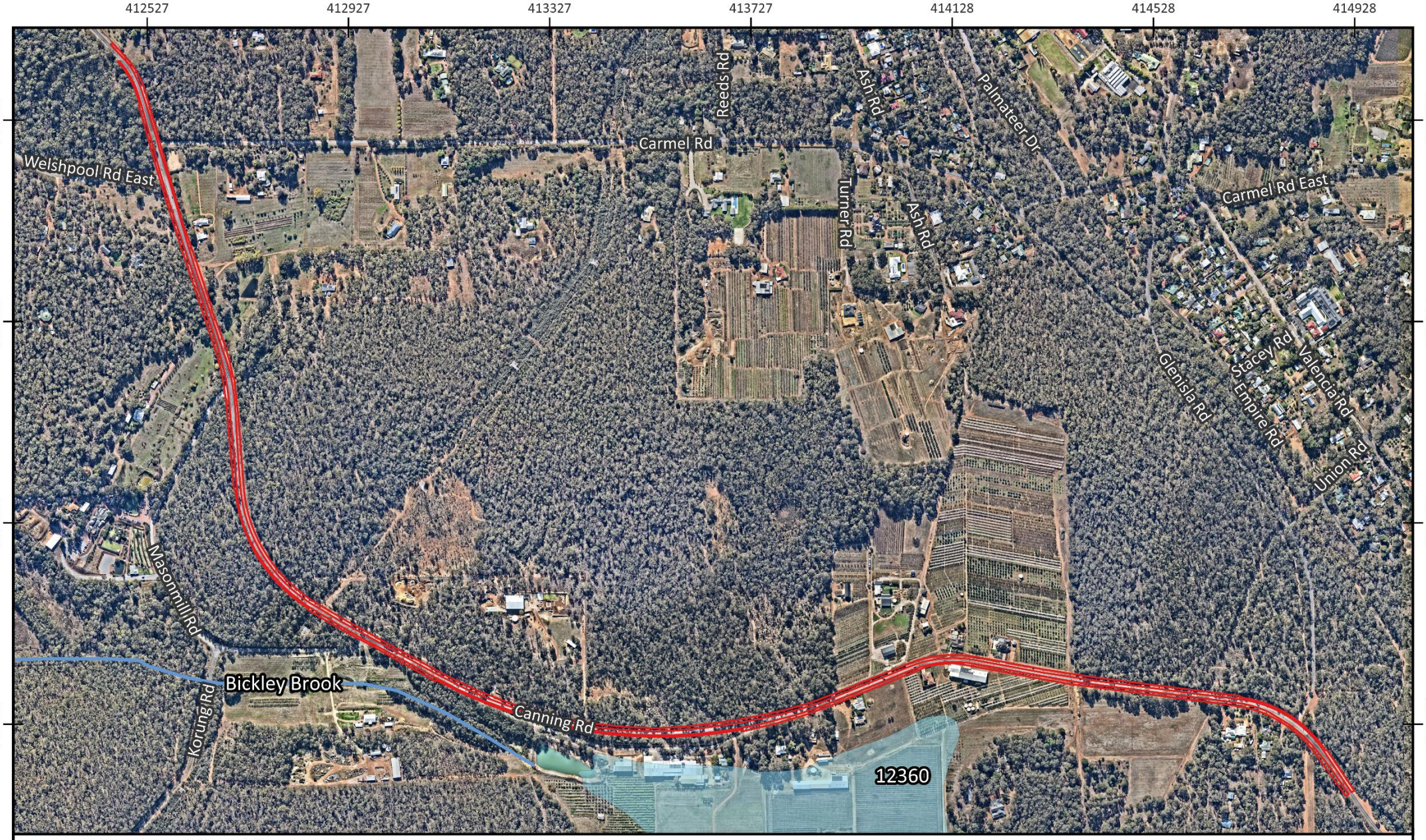

Map 12:

Wetlands and Waterways

Carmel, Western Australia

Legend

- Surface Hydrology Lines
- Geomorphic Wetlands
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
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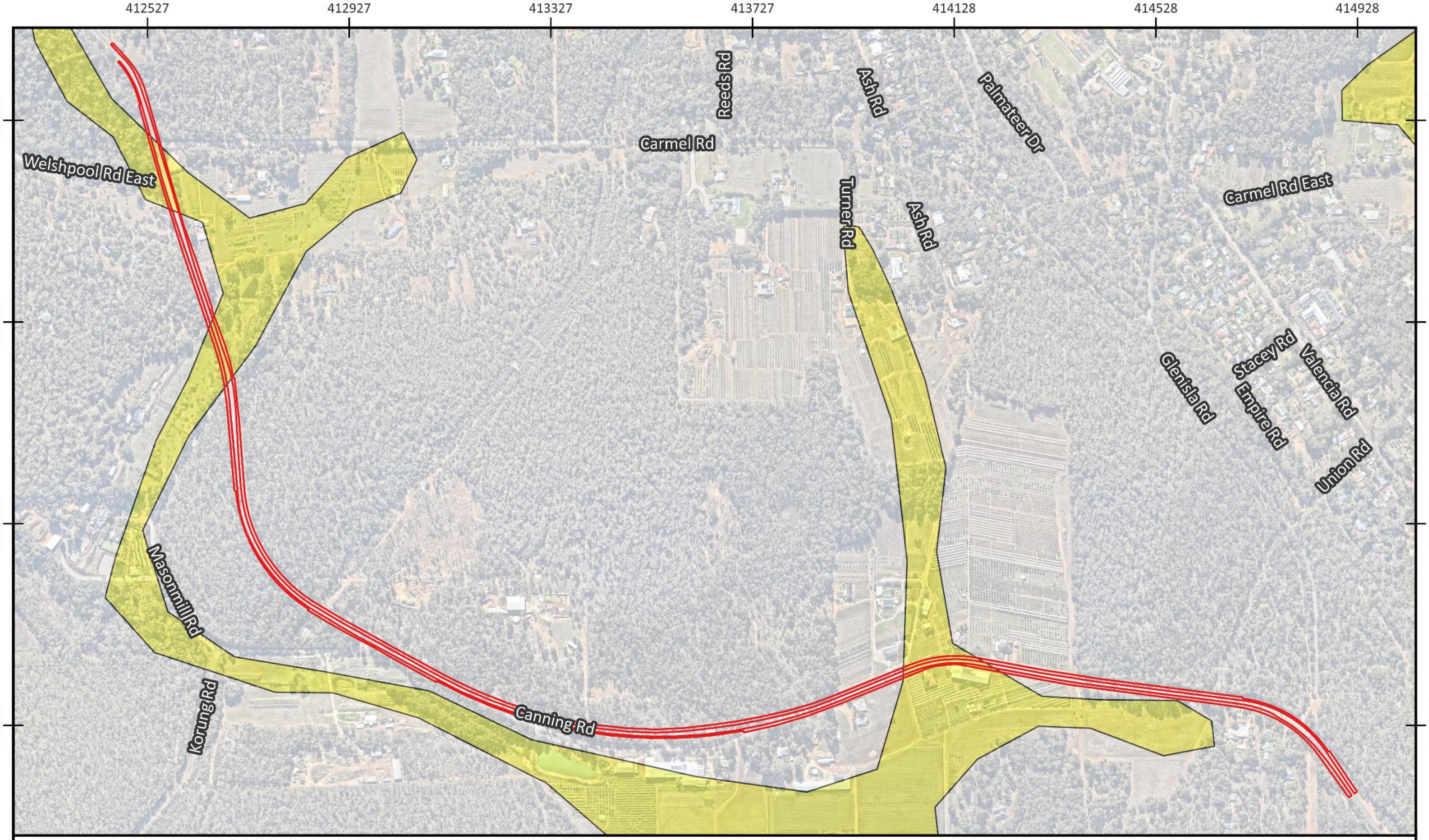


Map 13:
Flood Risk

Carmel, Western Australia

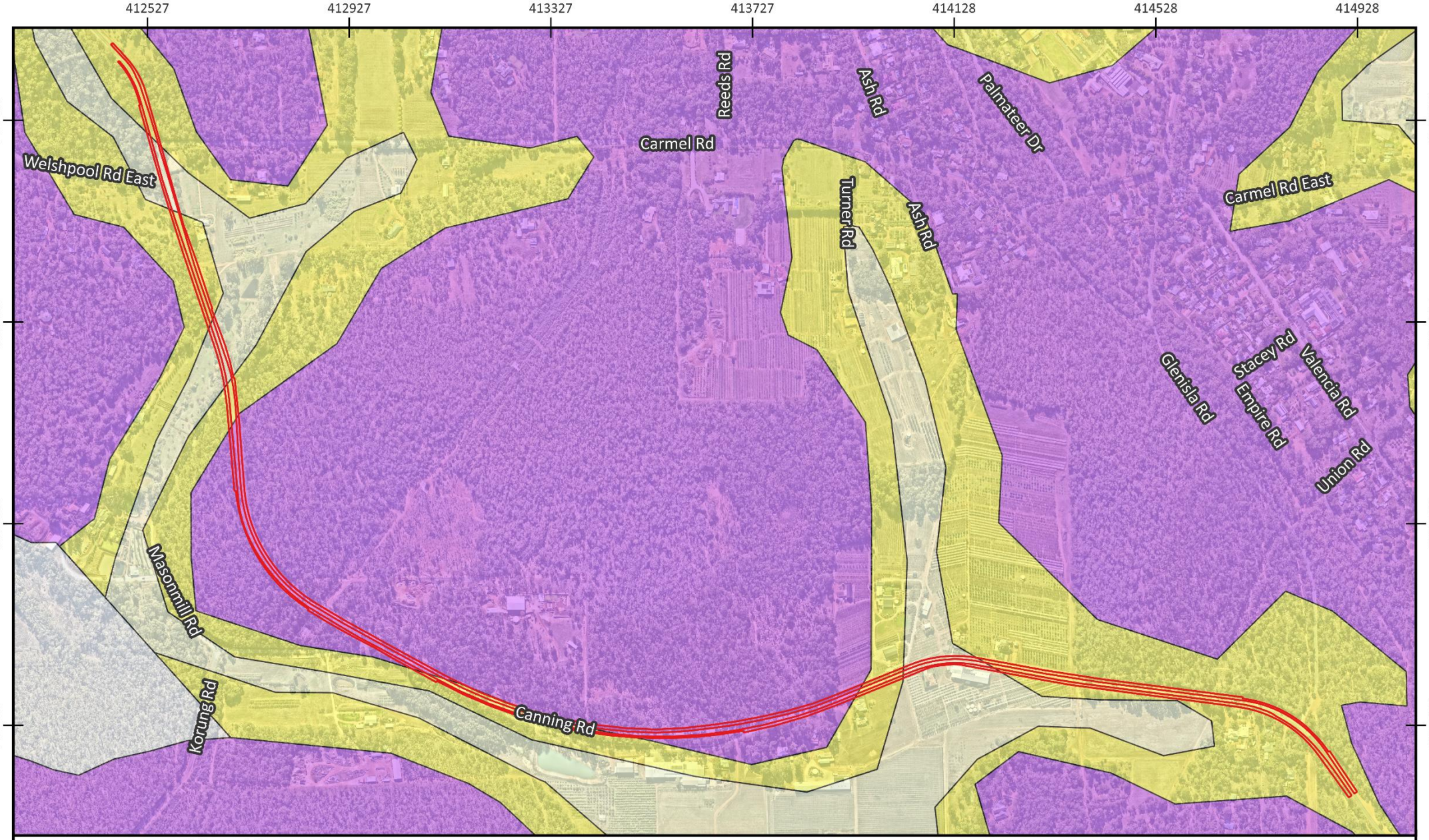
Legend

- L1
- M1
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 10000

0 100 200 m

N



Map 14:

Wind Erosion Risk

Carmel, Western Australia

Legend

- L1
- L2
- M1
- H2
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 10000

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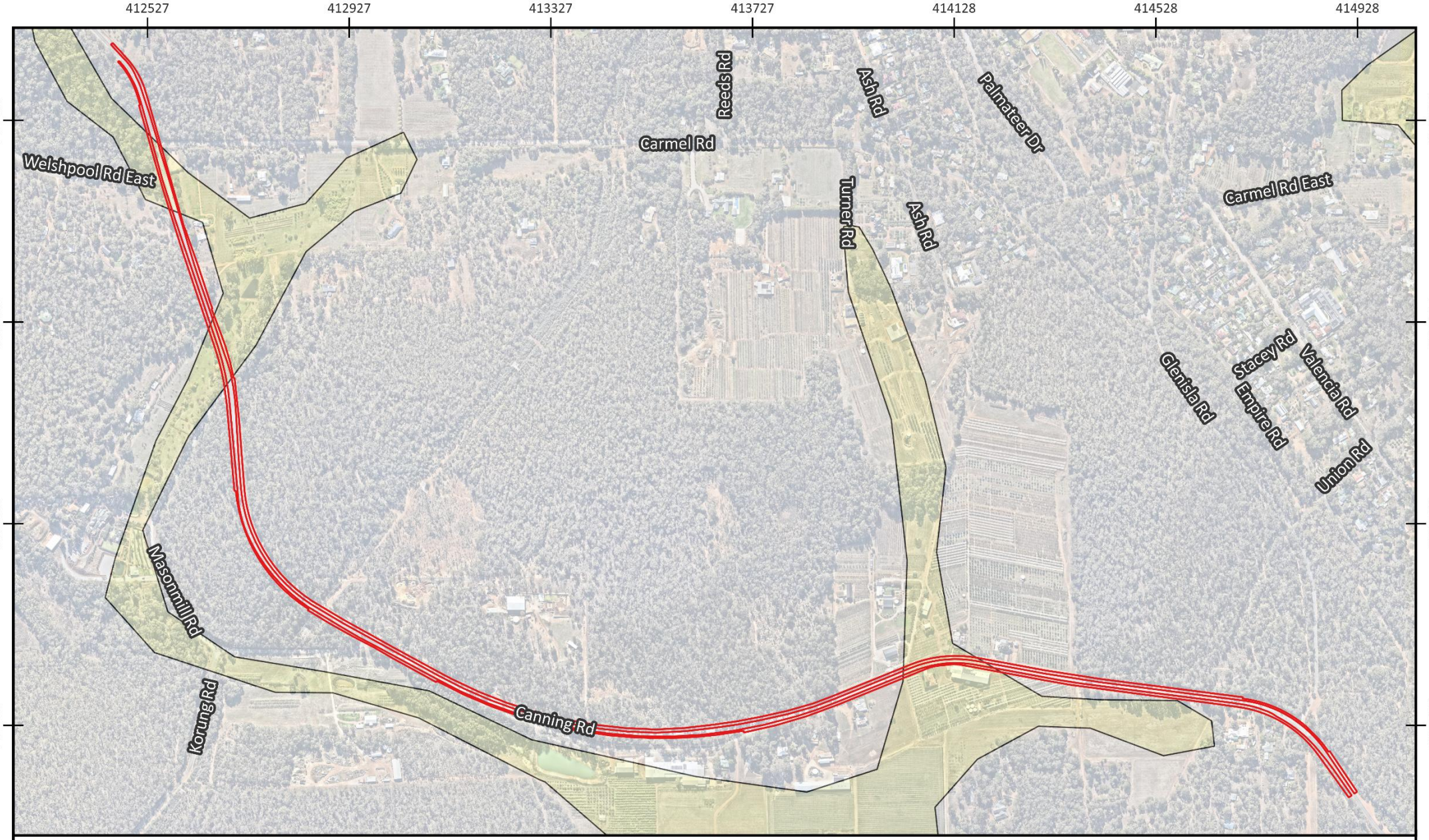


Map 15:

Salinity Risk or is Presently Saline

Carmel, Western Australia

Legend

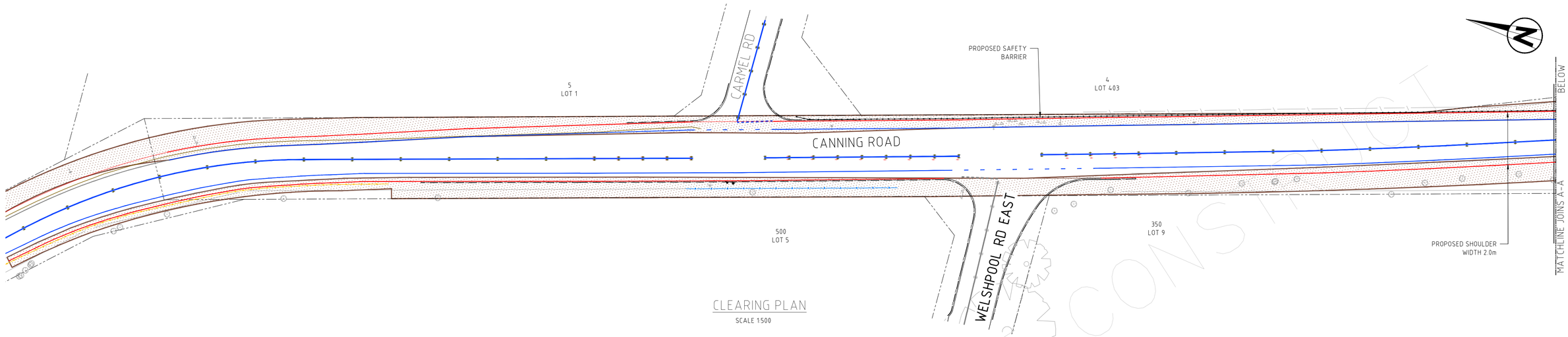
- L1
- L2
- Proposed Clearing Boundary

Client:	City of Kalamunda
Date:	26/02/2025
Created by:	Z. Stoney
Image Source:	Nearmap, 2025
Datum:	GDA2020 / MGA zone 50
Scale:	1: 10000

0 100 200 m

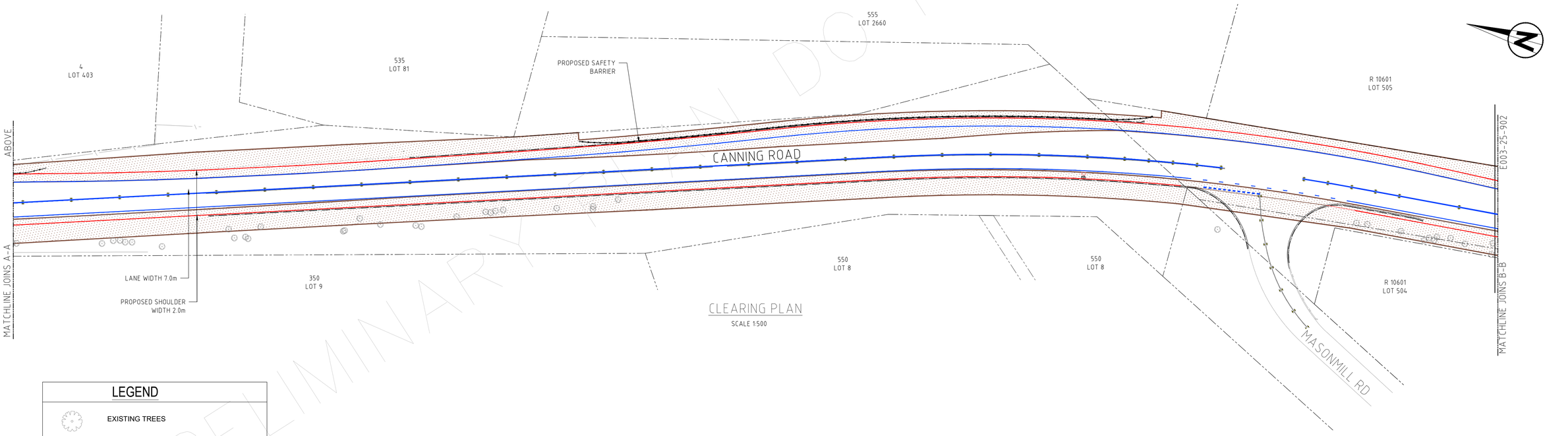
N

Appendix 1: Project Design



CLEARING PLAN

SCALE 1:500



CLEARING PLAN

SCALE 1:500

LEGEND

- EXISTING TREES
- PROPOSED PRELIMINARY CLEARING EXTENT : 37 378 SQM)
- EXISTING CADASTRE BOUNDARY
- PROPOSED SAFETY BARRIER
- PROPOSED SHOULDER
- PROPOSED PAVEMENT MARKING
- PROPOSED KERB

1:500 0 5m 10 15 20 25 30 35 40 45 50 55 60 65 70 75

CONCEPT ONLY

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AMENDMENTS

REV	DATE	DESCRIPTION	BY	CHK'D	APP'D
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DESIGN S.ALOYSIUS	DATE 06/06/2024	SCALE HORIZ. 1:500 VERT. NA
DRAWN S.ALOYSIUS	06/06/2024	DATUM AHD
CHECKED		GRID SYSTEM MGA94z50
AUTHORISED R.SMITH	03/02/2025	JOB NUMBER 3512

PROJECT
CANNING ROAD
WELSHPOOL RD E - GLENISLA RD

DRAWING TITLE
VEGETATION CLEARING PERMIT PLAN
SLK 5.81 - SLK 9.05
ROAD LIGHTING & SAFETY IMPROVEMENTS

PLAN No E03-25-900 REV 1

PRELIMINARY A1

MANAGER ASSET PLANNING & DELIVERY

RORY.S DATE

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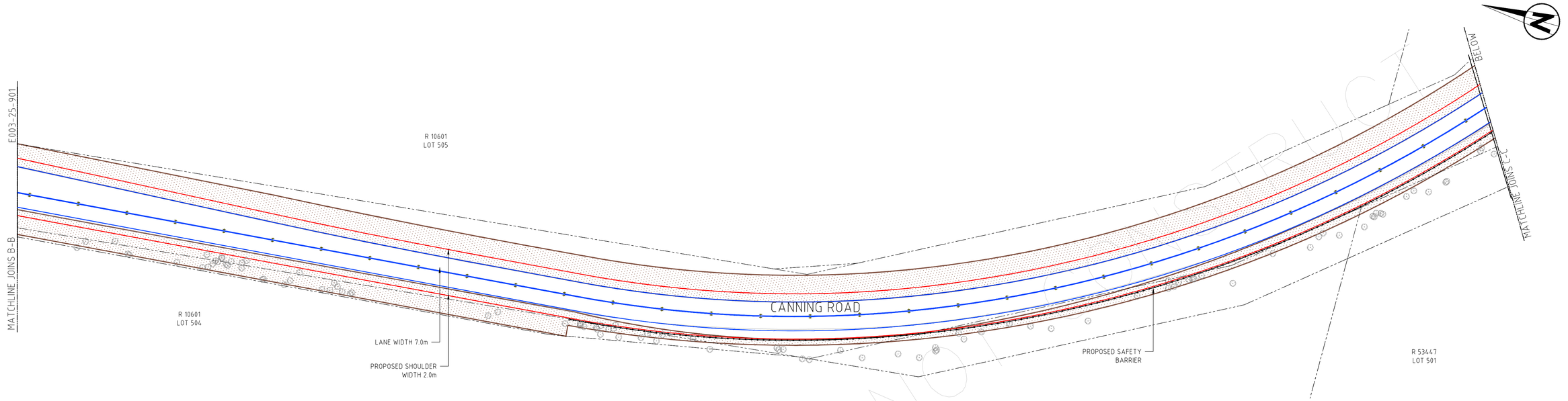
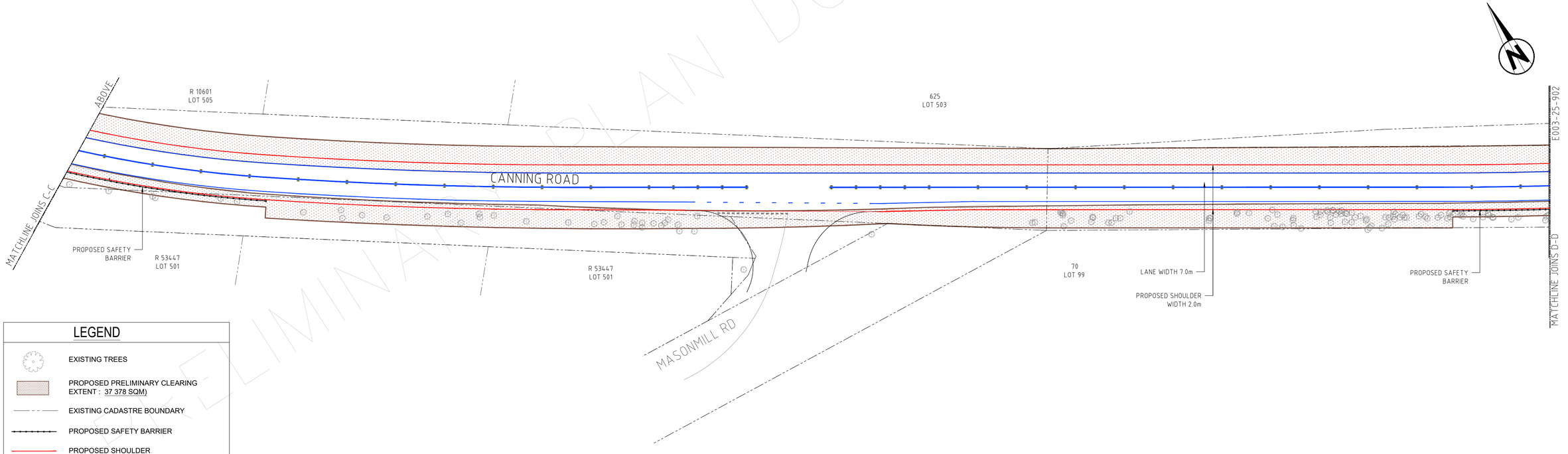


CLEARING PLAN

SCALE 1:500



CLEARING PLAN

SCALE 1:500

LEGEND

- EXISTING TREES
- PROPOSED PRELIMINARY CLEARING EXTENT : 37 378 SQM)
- EXISTING CADASTRE BOUNDARY
- PROPOSED SAFETY BARRIER
- PROPOSED SHOULDER
- PROPOSED PAVEMENT MARKING
- PROPOSED KERB

1:500 0 5m 10 15 20 25 30 35 40 45 50 55 60 65 70 75

AMENDMENTS

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DRAWN S.ALOYSIUS	06/06/2024	DATUM AHD
CHECKED		GRID SYSTEM MGA94z50
AUTHORISED R.SMITH	03/02/2025	JOB NUMBER 3512

PROJECT
CANNING ROAD
WELSHPOOL RD E - GLENISLA RD

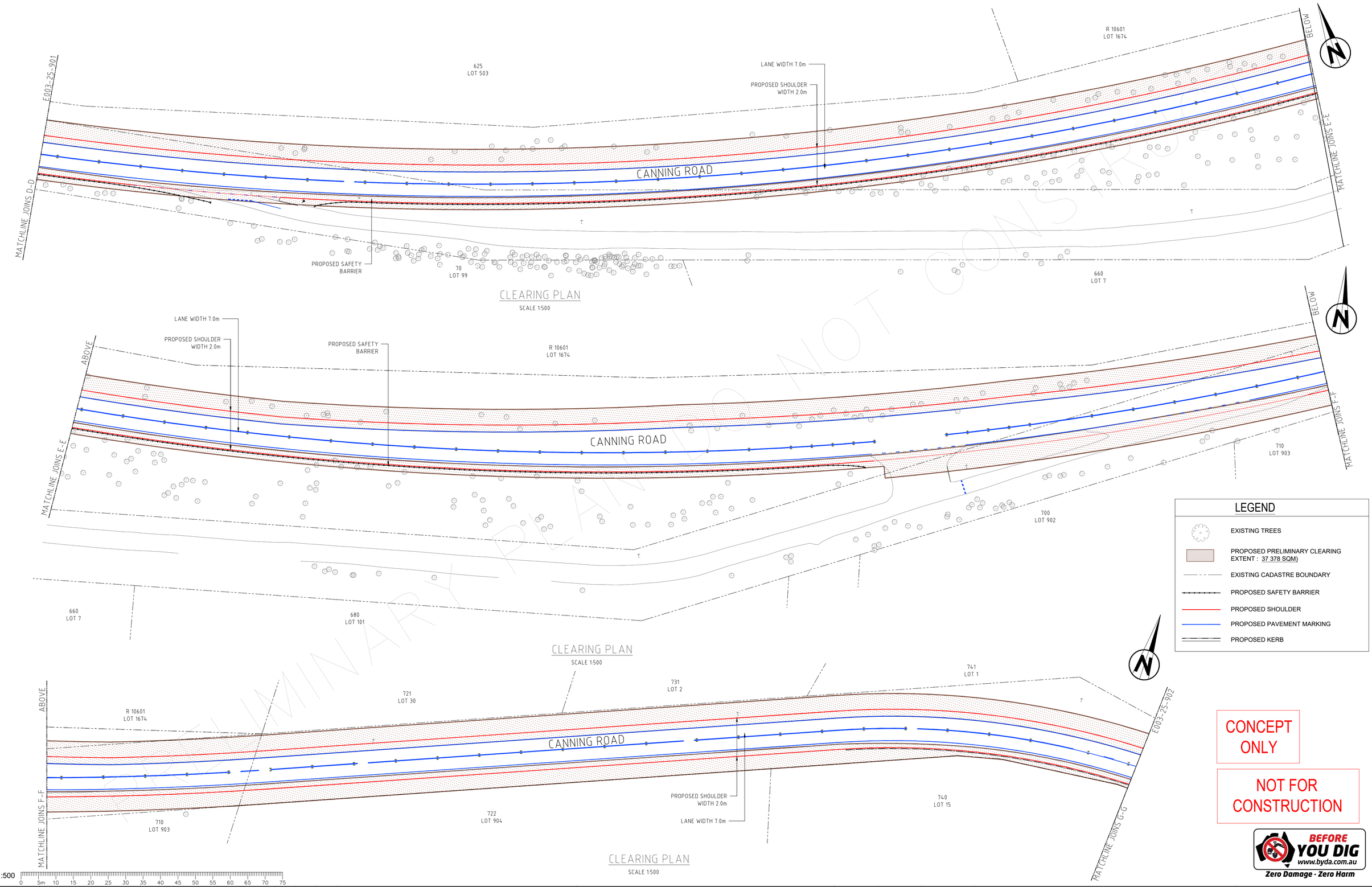
DRAWING TITLE
VEGETATION CLEARING PERMIT PLAN
SLK 5.81 - SLK 9.05
ROAD LIGHTING & SAFETY IMPROVEMENTS

PLAN No E03-25-901 REV 0

PRELIMINARY A1

MANAGER ASSET PLANNING & DELIVERY

RORY.S DATE



LEGEND

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- PROPOSED PRELIMINARY CLEARING EXTENT : 37 378 SQM)
- EXISTING CADASTRE BOUNDARY
- PROPOSED SAFETY BARRIER
- PROPOSED SHOULDER
- PROPOSED PAVEMENT MARKING
- PROPOSED KERB

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DRAWN S.ALOYSIUS	06/06/2024	DATUM AHD
CHECKED		GRID SYSTEM MGA94z50
AUTHORISED R.SMITH	03/02/2025	JOB NUMBER 3512

PROJECT
CANNING ROAD
WELSHPOOL RD E - GLENISLA RD

DRAWING TITLE
VEGETATION CLEARING PERMIT PLAN
SLK 5.81 - SLK 9.05
ROAD LIGHTING & SAFETY IMPROVEMENTS

PLAN No E03-25-902 REV 0

PRELIMINARY A1

MANAGER ASSET PLANNING & DELIVERY

RORY.S DATE

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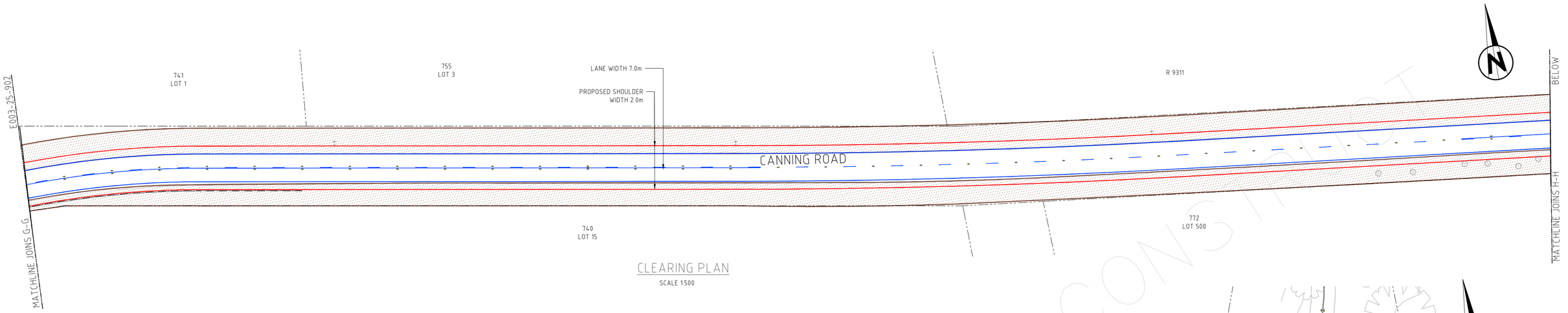
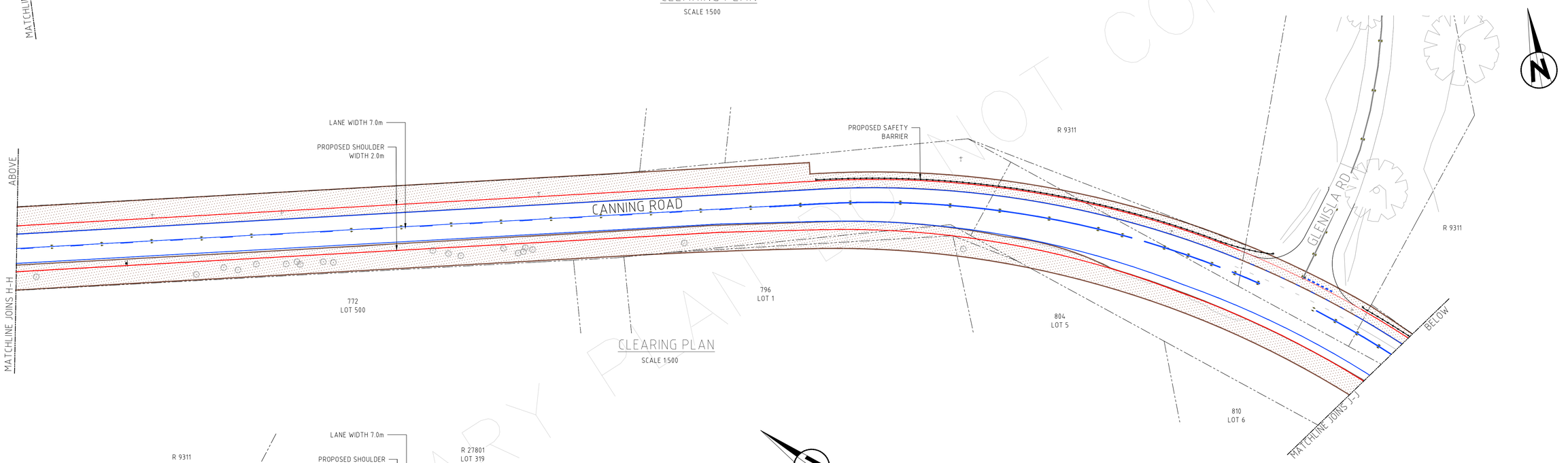


CLEARING PLAN

SCALE 1:500



CLEARING PLAN

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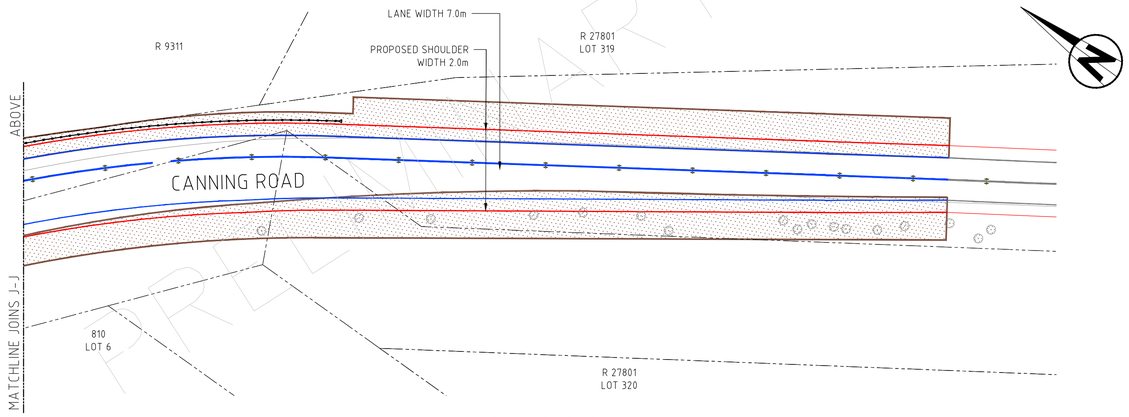

CLEARING PLAN

SCALE 1:500

LEGEND

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1:500

0 5m 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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PROJECT
CANNING ROAD
WELSHPOOL RD E - GLENISLA RD

DRAWING TITLE
VEGETATION CLEARING PERMIT PLAN
SLK 5.81 - SLK 9.05
ROAD LIGHTING & SAFETY IMPROVEMENTS

PLAN No E03-25-903 REV 0

PRELIMINARY A1

MANAGER ASSET PLANNING & DELIVERY

RORY.S DATE

Appendix 2: Conservation Codes

Western Australia (BC Act)

Conservation Code	Name	Description
T	Threatened	Flora or fauna that is rare or likely to become extinct, ranked according to their level of threat using IUCN Red List criteria (Schedules 1-3 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
CR	Critically endangered	Species considered to be facing an extremely high risk of extinction within the wild in the immediate future
EN	Endangered	Species considered to be facing a very high risk of extinction in the wild in the near future
VU	Vulnerable	Species considered to be facing a high risk of extinction in the wild in the medium-term future
EX	Extinct Species	Species where 'there is no reasonable doubt that the last member of the species has died (Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
EW	Extinct in the Wild	Species that are known to only survive in cultivation, in captivity, or as a naturalised population well outside its past range; and it has not been recorded in its known or expected habitat at appropriate seasons anywhere in its past range, despite surveys over a timeframe appropriate to its life cycle and form
MI	Migratory Species	Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth (Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice)
CD	Conservation Dependent	Species of special conservation interest (conservation dependent fauna), being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened (Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice)
OS	Specially Protected	Fauna otherwise in need of special protection to ensure their conservation (Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice)
P	Priority Species	Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or

Conservation Code	Name	Description
		flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.
P1	Priority One	Poorly known species – Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either very small or on lands not managed for conservation, such as road verges, urban areas, farmland, active mineral lease and under threat of habitat destruction or degradation.
P2	Priority Two	Poorly known species – Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, such as national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves and similar.
P3	Priority Three	Poorly known species – Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat
P4	Priority Four	Rare or near threatened and other species in need of monitoring.

Source: DBCA, 2023

Commonwealth (EPBC Act)

Category	Description
Critically Endangered	Species facing an extremely high risk of extinction in the wild in the immediate future
Endangered	Species facing a very high risk of extinction in the wild in the near future
Vulnerable	Species facing a high risk of extinction in the wild in the medium term