

DRAFT



Concept Plan Report

LARA TO YOU YANGS SHARED TRAIL

DRAFT

PROJECT
LARA TO YOU YANGS SHARED TRAIL
Capital Works

CLIENT
City of Greater Geelong
Wadawurrung Country, PO Box 104, Geelong, VIC 3220

CLIENT REFERENCE
CGG049035

JOB NUMBER
221105

PHASE
Feasibility Study and Concept Plan

REV.	COMMENT	DATE	BY	CHECKED
1	Draft Issues and Opportunities for PWG	07.08.23	LF/KM/CC	CC
2	Final Issues and Opportunities for Council	08.09.23	LF/CC	CC
3	Final Issues and Opportunities for Council	14.09.23	LF/CC	CC
4	Draft Feasibility Report (Concept) for Council	10.10.23	LF/KM	CC
5	Final Feasibility Report (Concept) for Council	24.11.23	LF/KM	CC
6	Concept Plan Report for Council	24.11.23	LF/KM	CC

ACKNOWLEDGEMENT OF COUNTRY
We acknowledge the Wadawurrung People as the Traditional Owners of the Land, Waterways and Skies. We pay our respects to their Elders, past and present. We Acknowledge all Aboriginal and Torres Strait Islander people who are part of our Greater Geelong community today

LEAD CONSULTANT

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CLIENT



DISCLAIMER

The preparation of this document is based on background research and field work undertaken by Pollen Studio to date: including site photos, site walks with Council, background review of relevant strategic and planning policy and additional research. This work was undertaken to assist in understanding the experiences, natural and built environment, existing features, neighbouring edges and context within the surrounding location.

Our observations are distilled in diagrams, captions and key site imagery for discussion purposes with City of Greater Geelong and as a precursor to design works associated with the Lara to You Yangs Shared Trail. The opinions expressed in this document are not fixed or final, and is relevant only within the context of understanding the current site as it is and the background context of its masterplanning and development over time.

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CONCEPT

Based on the initial site assessment and analysis, the following demonstrates a concept for the shared trail alignment.

Aims

The key aims of the concept are to:

- Bridge a key gap in the shared trails regional network as identified in the Shared Trails Master Plan (*City of Greater Geelong, 2020*)
- Optimise open space experience in by creating an iconic shared trail experience
- Understand the shared trail width and alignment in relation to a variety of spatial conditions and land usages (road reserves, Serendip Sanctuary and potential acquired land)
- Connect pedestrians and cyclist safely to key points in the shared trail network
- Protect and connect areas of ecological importance
- Protect and connect areas of cultural importance

Concept

Each of the 3 shared trail sections differ in their constraints and opportunities as described.

Section 1: Hovells Creek Trail to Serendip Sanctuary

Begins at the end of Hovells Creek Trail. Crosses Windermere Road and runs within the northern road reserve before entering Serendip Sanctuary near the main entrance. Due to road reserve constraints, the shared trail alignment runs along the fence with a 1m offset to provide the greatest distance from the road edge.

Section 2: Serendip Sanctuary

The shared trail alignment follows the existing firebreak within Serendip Sanctuary. Opportunities for the alignment within the Sanctuary include moments of connection

between trail users and wildlife, as well as, greater distance and protection (vegetation buffer) from the road. The shared trail alignment has a 1m offset from the proposed wildlife fence to minimise impacts on existing tree TPZ (tree protection zones, assumed as the canopy dripline) and SRZ (structural root zone, assumed as smaller than canopy). An Arboricultural Impact Assessment will be required in future design development to better understand the impact of the proposed infrastructure on existing vegetation.

Section 3: Serendip Sanctuary to You Yangs Regional Park

The shared trail alignment crosses Plains Road and along a 10m corridor of potential acquired land, before crossing Peak School Road into a 5m corridor of potential acquired land. This alignment includes a new bio-link buffer to provide continuity of the existing planted buffer within Serendip Sanctuary, and a buffer to the road reserve. The shared trail crosses to the eastern road reserve at the Bluestone Cottage Ruins to minimise impact on areas of identified high quality EVC (ecological vegetation class) areas, and directs shared trail users into the existing gate within You Yangs Regional Park. The acquisition of private land will provide optimal outcomes for shared trail users and increased biodiversity along Flinders Avenue. The connection and views to You Yangs Regional Park are maintained and framed as part of the experience.

Planting Note

In detailed design development, plant selection will be based on in-depth review and analysis of existing species within EVC, identified indigenous and biodiversity values, habitat for native fauna and biolinks, in accordance with recommendations within ecological and biodiversity reports for the area, and additional input from key stakeholders including City of Greater Geelong Environment Team and Parks Victoria.

OVERVIEW

Key alignments within the concept are:

- SHARED TRAIL WITHIN ROAD RESERVE
- SHARED TRAIL WITHIN SERENDIP SANCTUARY
- SHARED TRAIL WITHIN POTENTIAL ACQUIRED LAND
- SHARED TRAIL ALTERNATIVE ALIGNMENT WITHIN ROAD RESERVE
*REFER TO APPENDIX 1: CONCEPT - ALTERNATIVE ALIGNMENT

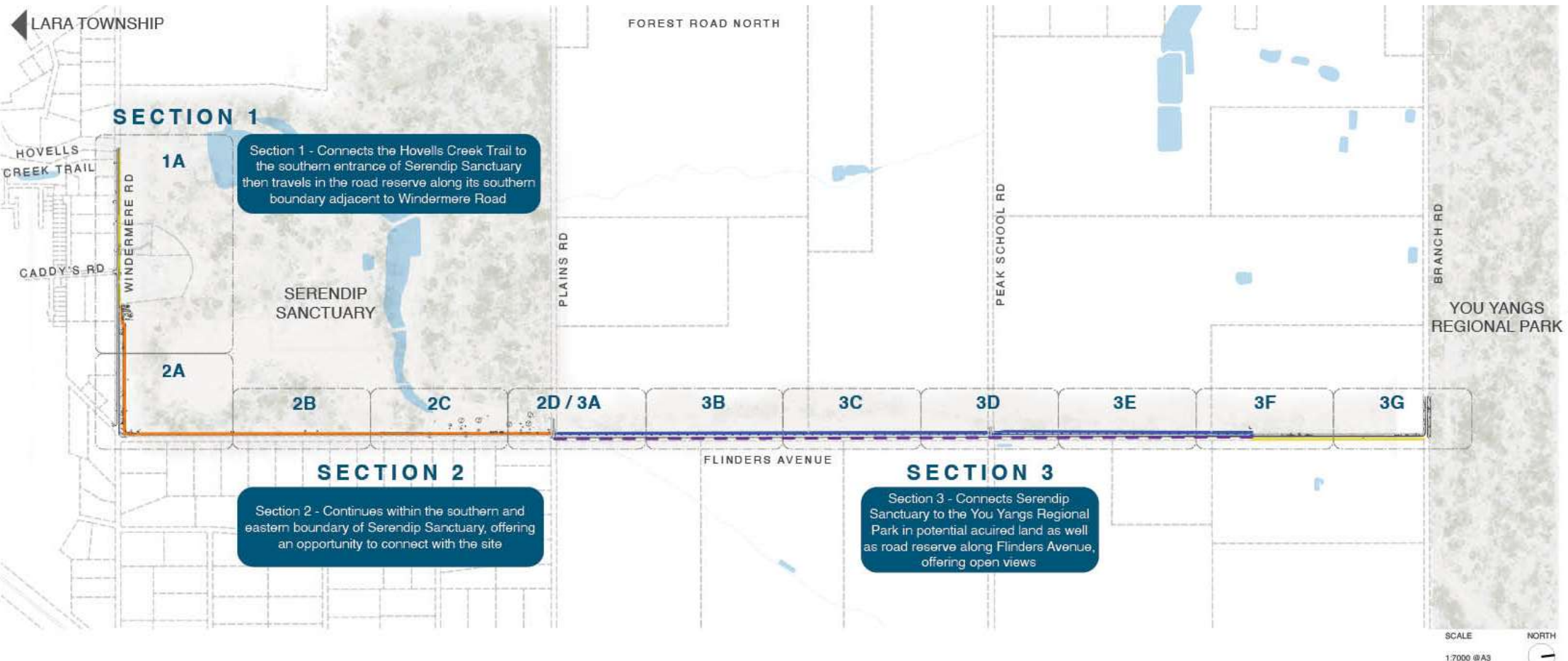
The overall concept alignment, shown in 3 sections, extends the existing Hovells Creek Trail and explores a link through multiple conditions and land uses within road reserves, Serendip Sanctuary and potential acquired land connecting to the You Yangs Regional Park.



Road Reserve

Serendip Sanctuary

Potential Acquired Land



PLAN 1A

LEGEND

EXISTING

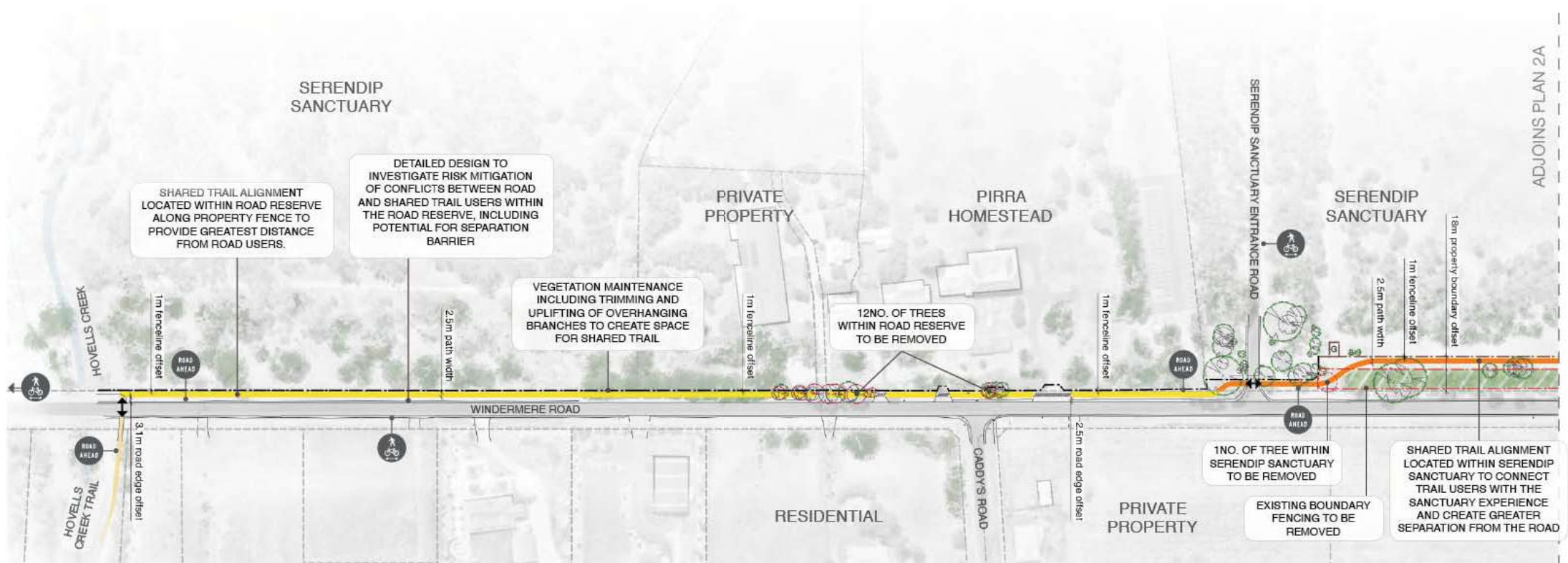
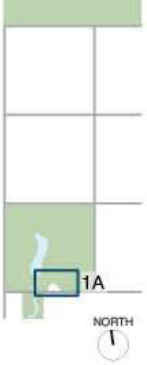
- VEGETATION
- EXISTING / UPGRADED BOUNDARY FENCE
- PROPERTY BOUNDARY
- EXISTING BOUNDARY FENCE TO BE REMOVED

PROPOSED

- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN ROAD RESERVE
- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN SERENDIP SANCTUARY
- ROAD CROSSING
- PROPOSED WILDLIFE FENCING
- GATE WITH ESTA MARKER

- EXISTING VEGETATION MAINTENANCE WORKS
- SHARED TRAIL CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 120-200M FROM CROSSING (IN ACCORDANCE WITH VICROADS)
- ROAD CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 30M FROM ROAD (IN ACCORDANCE WITH VICROADS)

KEY PLAN



PLAN 1A

PLANS 2A & 2B

LEGEND

EXISTING



VEGETATION

PROPERTY BOUNDARY

EXISTING BOUNDARY FENCE TO BE REMOVED

PROPOSED

2.5M WIDE CONCRETE SHARED TRAIL WITHIN SERENDIP SANCTUARY

PROPOSED WILDLIFE FENCING

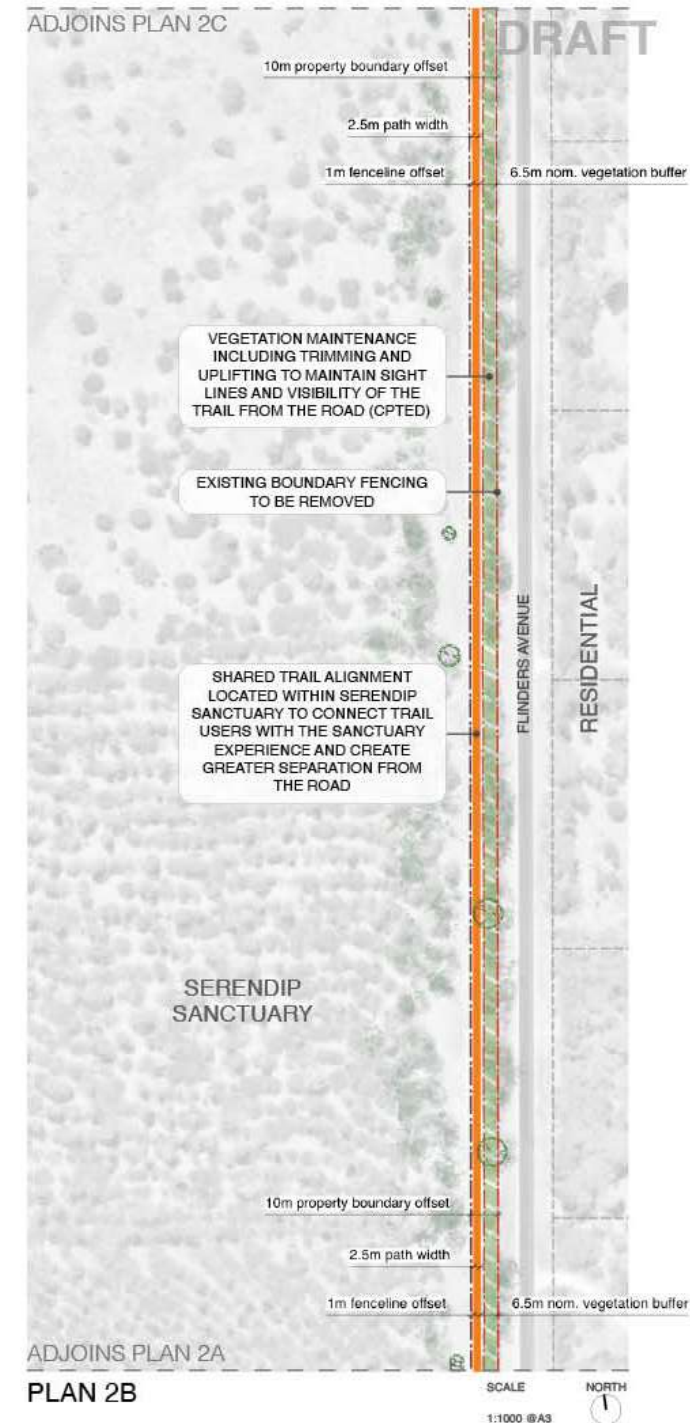
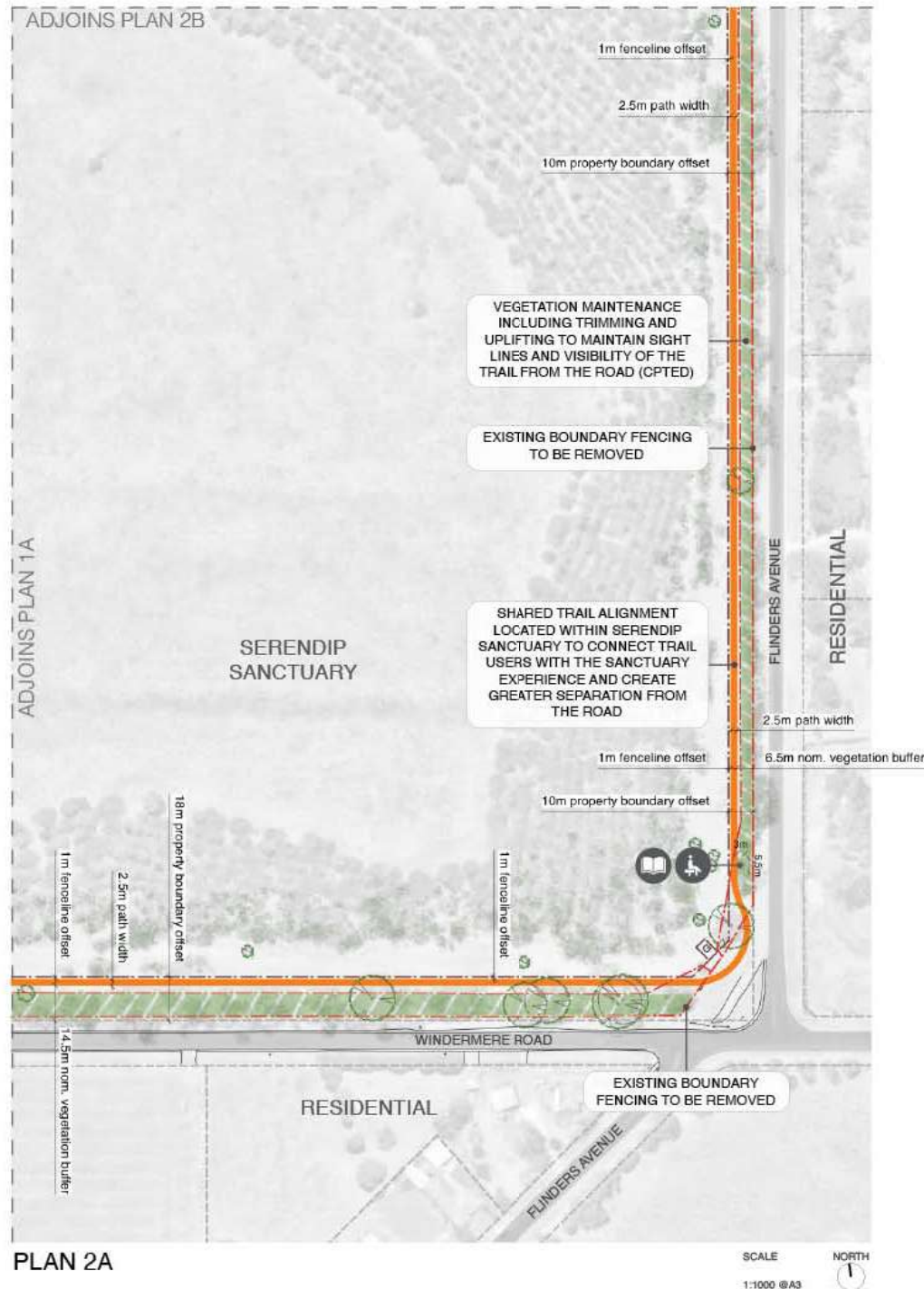
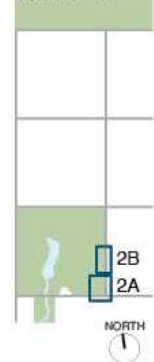
GATE WITH ESTA MARKER

EXISTING VEGETATION MAINTENANCE WORKS

REST NODE

FUTURE INTERPRETATIVE SIGNAGE OPPORTUNITY

KEY PLAN



PLANS 2C & 2D/3A

LEGEND

EXISTING

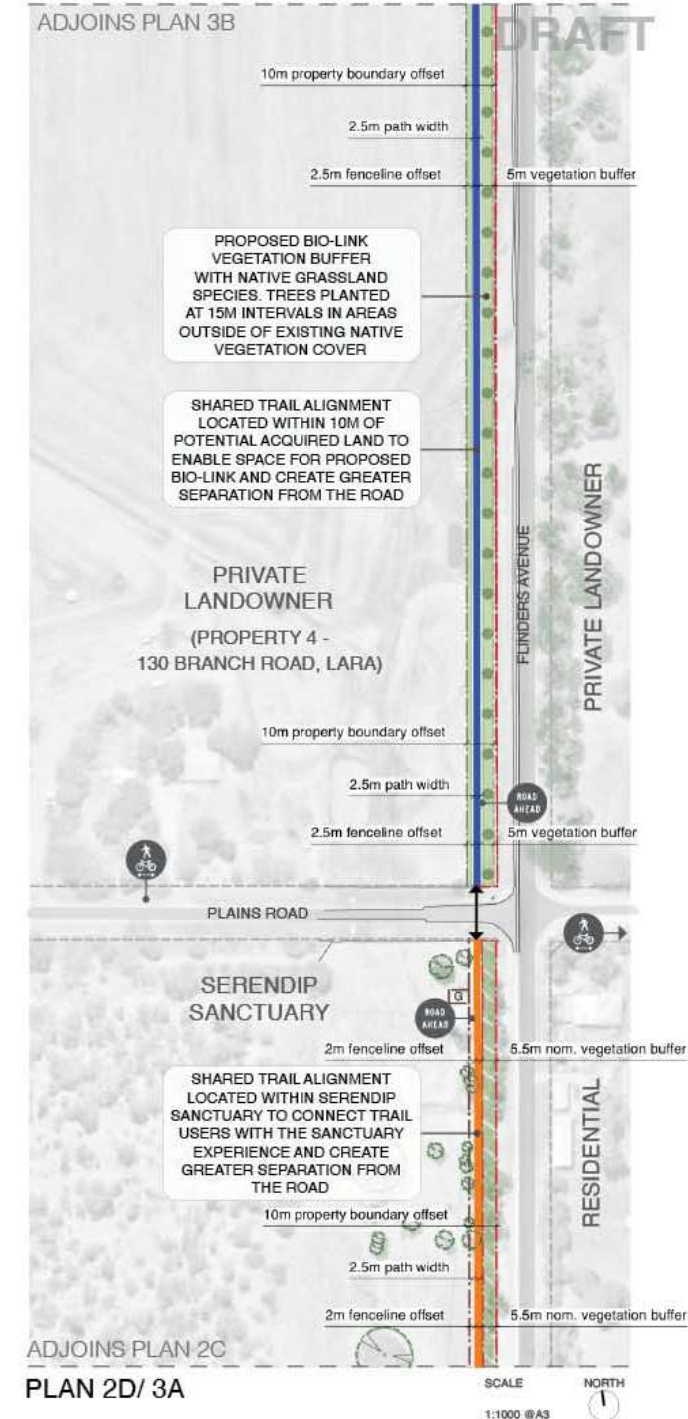
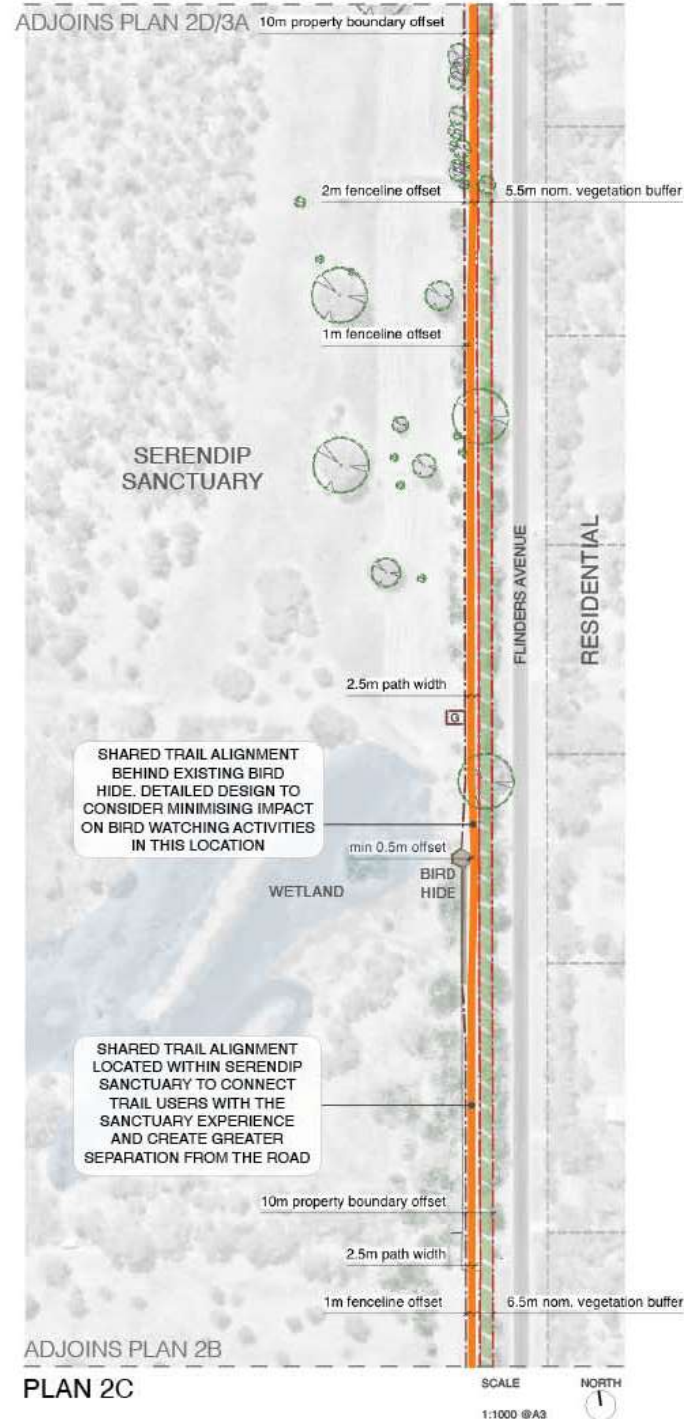
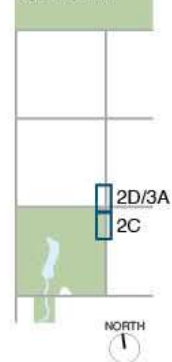
- VEGETATION
- PROPERTY BOUNDARY
- EXISTING BOUNDARY FENCE TO BE REMOVED

PROPOSED

- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN SERENDIP SANCTUARY
- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN POTENTIAL ACQUIRED LAND
- ROAD CROSSING
- PROPOSED WILDLIFE FENCING
- GATE WITH ESTA MARKER
- PROPOSED NEW FARM FENCING
- UPLIFTED VEGETATION
- BIO-LINK PLANTING INCLUDING TREES FOR SHADING
- SHARED TRAIL CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 120-200M FROM CROSSING (IN ACCORDANCE WITH VICROADS)
- ROAD CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 30M FROM ROAD (IN ACCORDANCE WITH VICROADS)

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

KEY PLAN



PLANS 3B & 3C

LEGEND

EXISTING

-  VEGETATION
-  PROPERTY BOUNDARY
-  EXISTING BOUNDARY
-  FENCE TO BE REMOVED

PROPOSED

-  2.5M WIDE CONCRETE SHARED TRAIL WITHIN POTENTIAL ACQUIRED LAND
-  PROPOSED NEW FARM FENCING

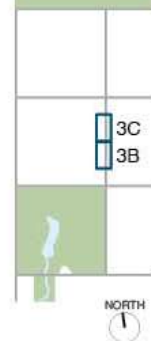
-  BIO-LINK PLANTING INCLUDING TREES FOR SHADING

-  REST NODE

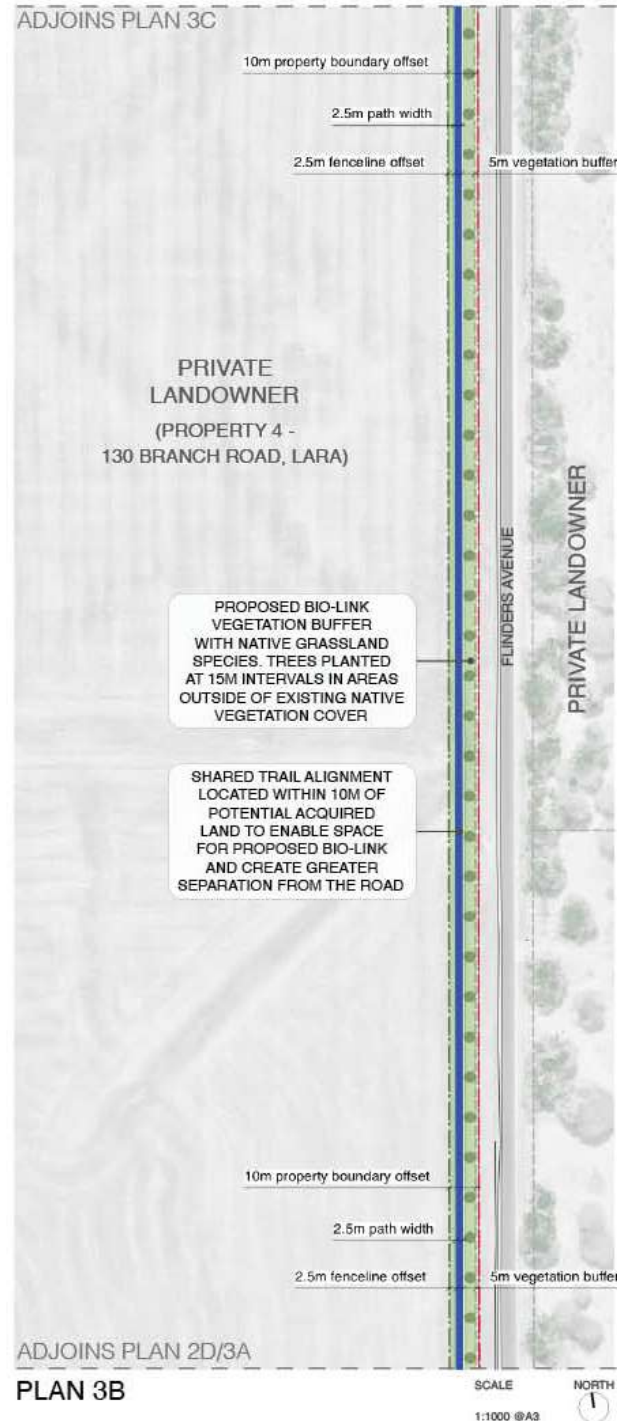
-  FUTURE INTERPRETATIVE SIGNAGE OPPORTUNITY

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

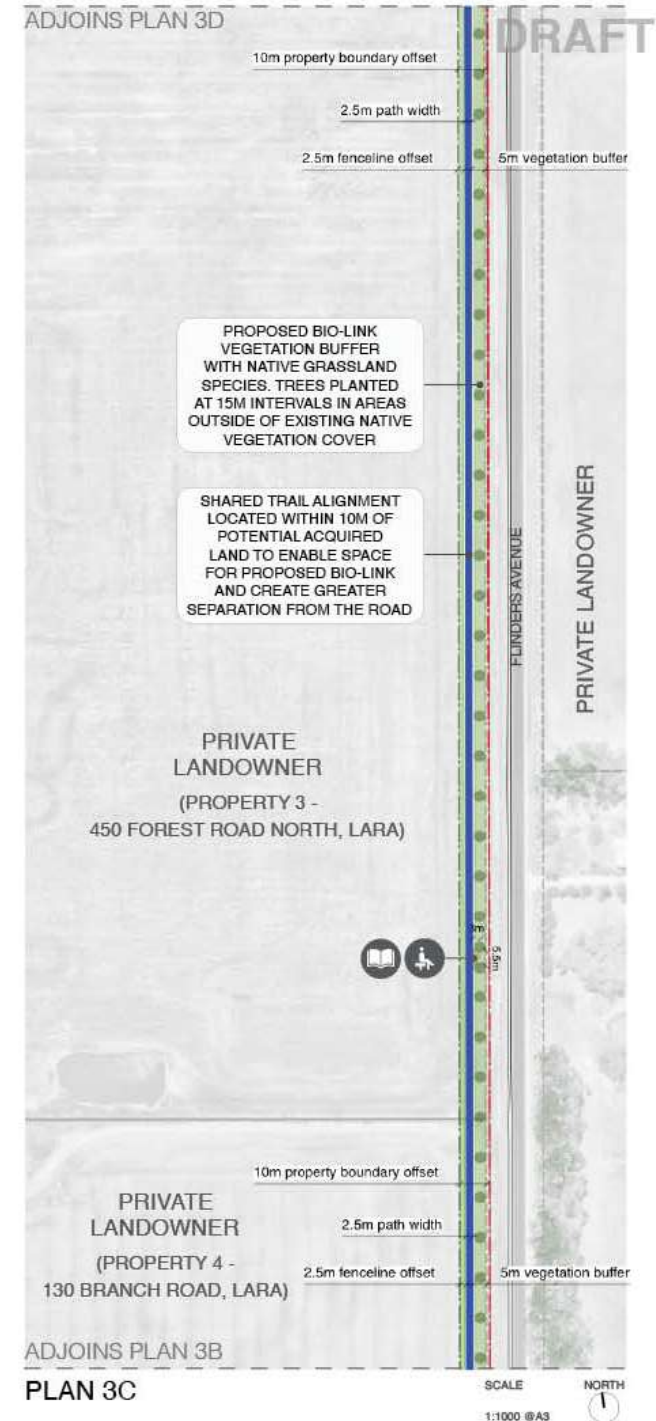
KEY PLAN



ADJOINS PLAN 3C



ADJOINS PLAN 3D



PLANS 3D & 3E

LEGEND

EXISTING

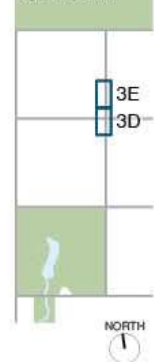
- VEGETATION
- PROPERTY BOUNDARY
- EXISTING BOUNDARY FENCE TO BE REMOVED

PROPOSED

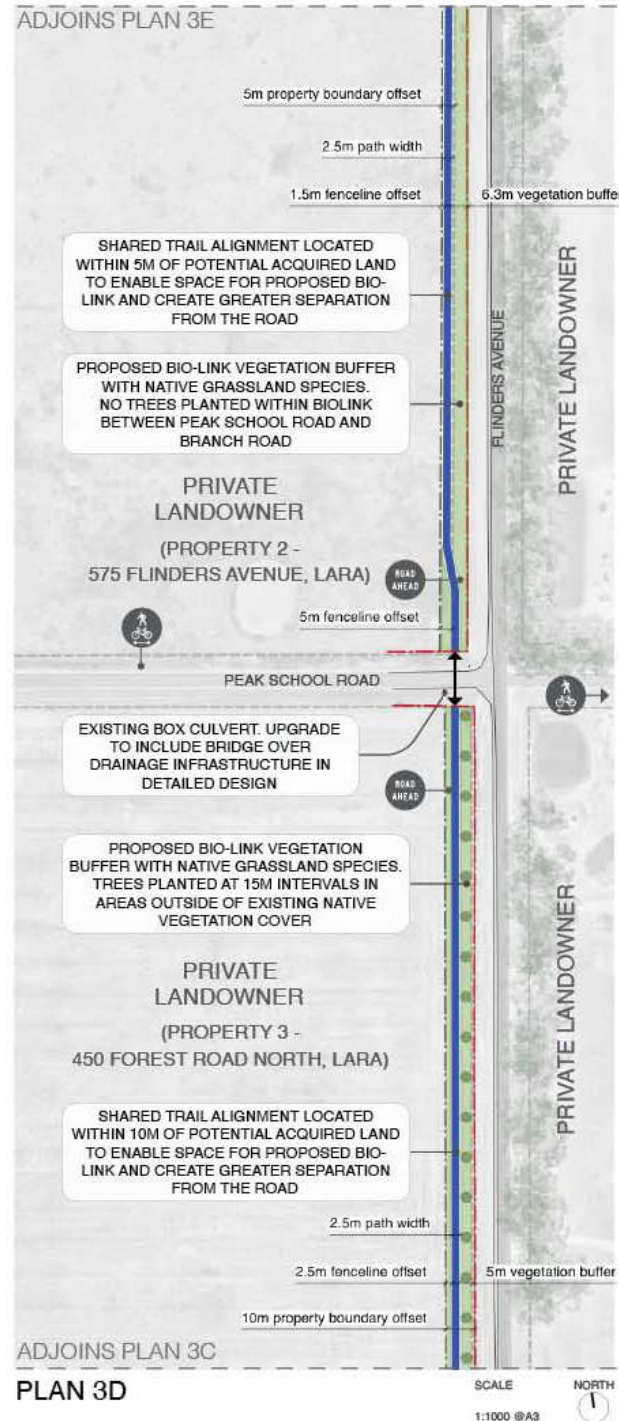
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NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

KEY PLAN



ADJOINS PLAN 3E



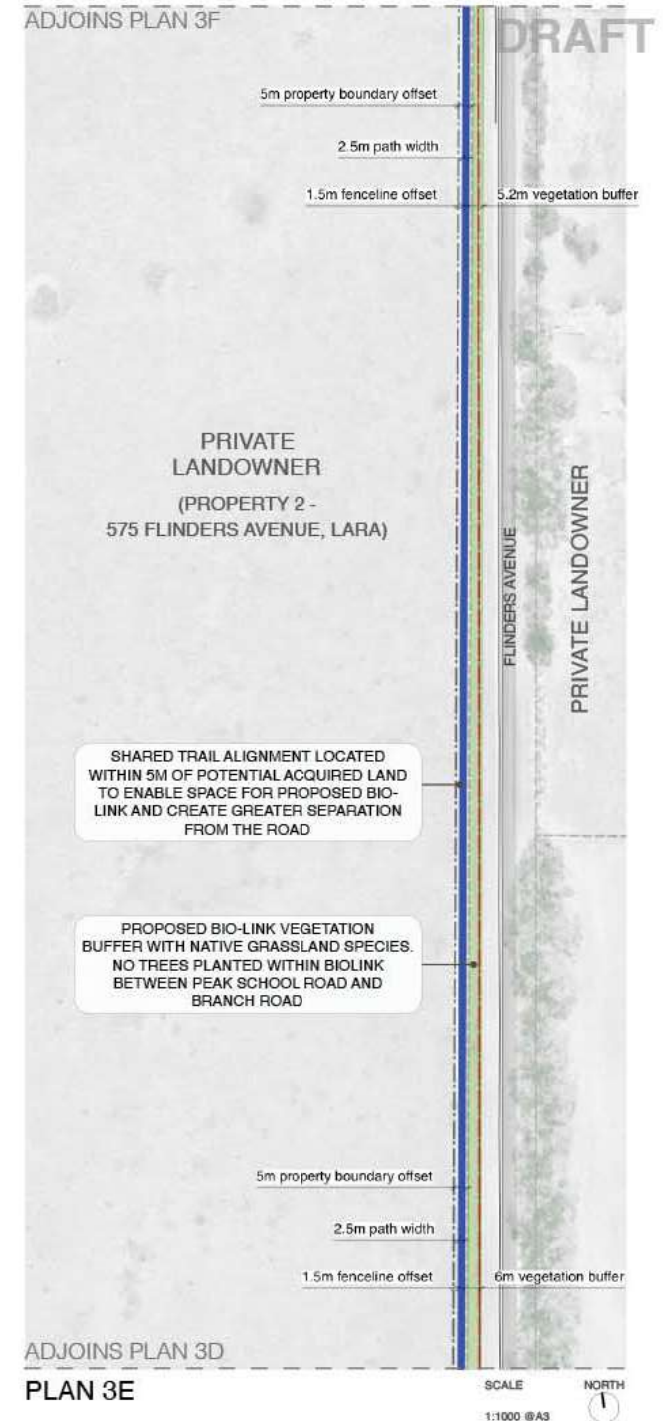
ADJOINS PLAN 3C

PLAN 3D

SCALE
1:1000 @A3



ADJOINS PLAN 3F



ADJOINS PLAN 3D

PLAN 3E

SCALE
1:1000 @A3



PLANS 3F & 3G

LEGEND

EXISTING

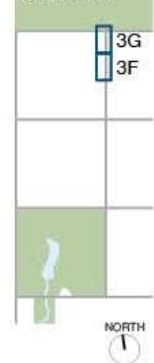
- VEGETATION
- PROPERTY BOUNDARY
- EXISTING BOUNDARY FENCE TO BE REMOVED

PROPOSED

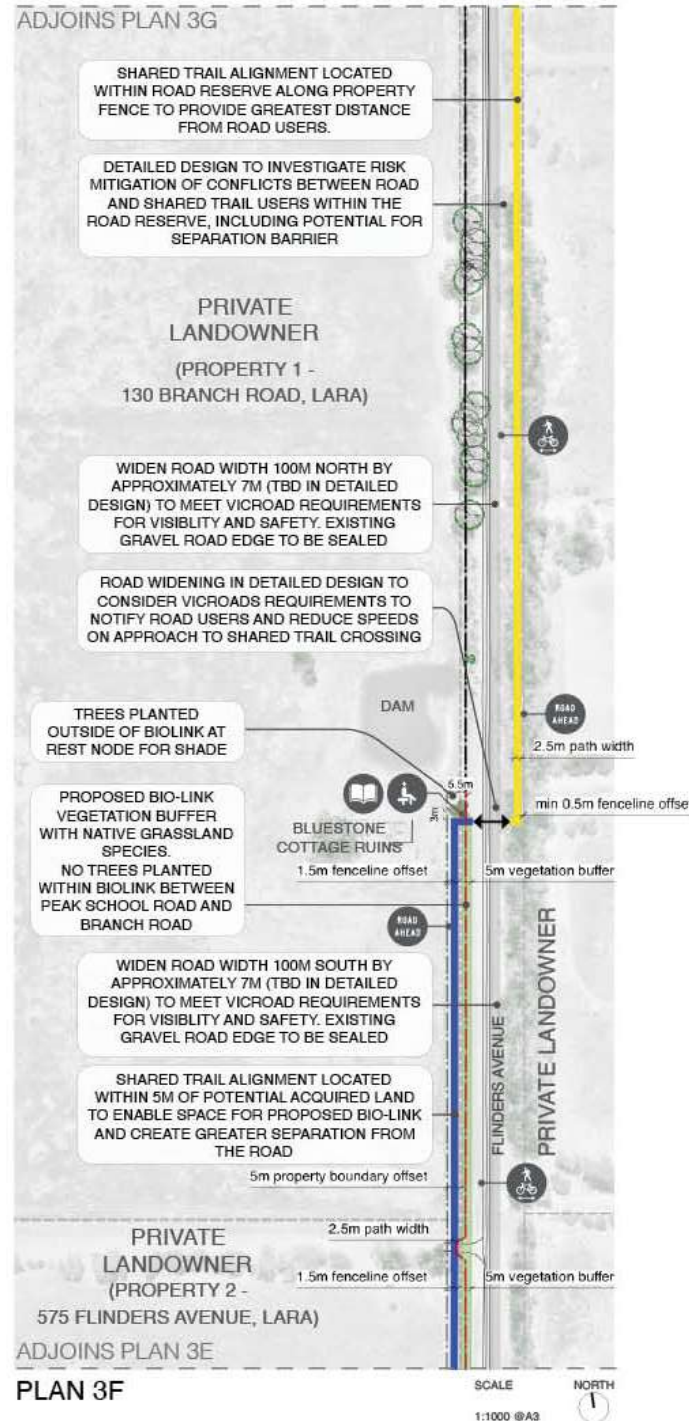
- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN POTENTIAL ACQUIRED LAND
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- FUTURE INTERPRETATIVE SIGNAGE OPPORTUNITY
- REST NODE

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

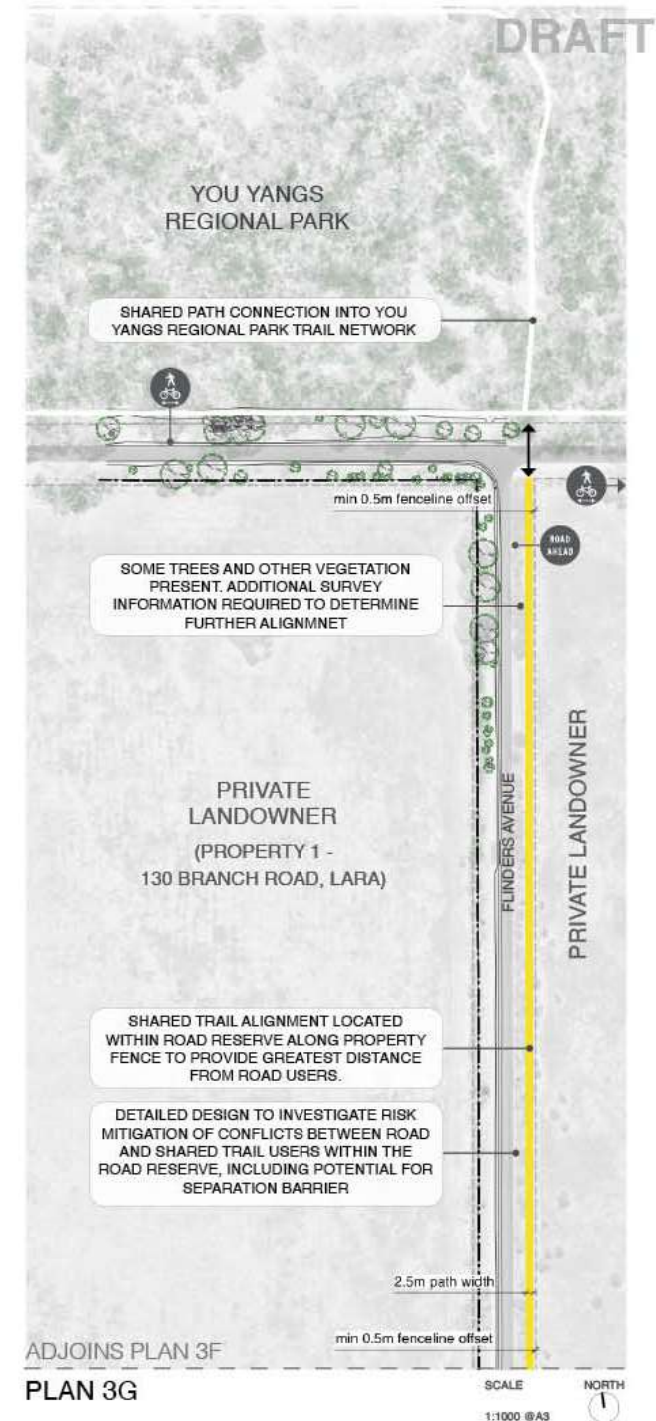
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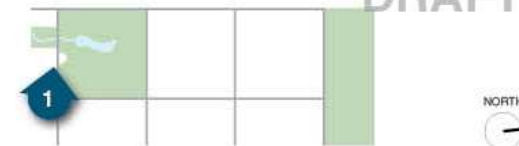


ADJOINS PLAN 3G



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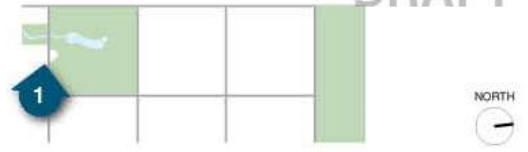
EXISTING VIEW

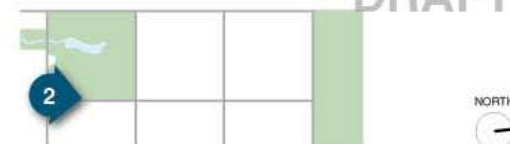
VIEW IN FRONT OF PIRRA HOUSE ALONG WINDERMERE ROAD

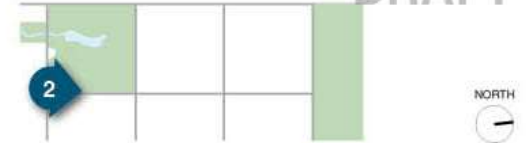
1

PROPOSED VIEW
SHARED TRAIL IN FRONT OF PIRRA HOUSE ALONG WINDERMERE ROAD

DRAFT











RISK ASSESSMENT SUMMARY

From a landscape perspective, the following outlines risks and mitigation in pursuing the preliminary concept option.

Concept Option

- Shared trail within the road reserve. Sections of the shared trail alignment pass through narrow road corridors adjacent to cars travelling at high speed. The proposed alignment maximises the offset from the road edge and where possible proposes a vegetation buffer to provide greatest separation from road users. Sections of existing gravel road shoulder are proposed to be sealed to formalise the delineation between road and road reserve. Evaluation audit of risk and safety is recommended post-installation of the shared trail alignment to better understand the user experience and any additional risks that may have been unforeseen. Future additional risk mitigation design works may be required upon re-assessment.
- Road crossings. All road crossing points are potential conflict points between road users and shared trail users. Risk mitigation will be considered through warning signage on the approach to each crossing point. The concept identifies locations for signage to be installed in accordance with VicRoads, on approach to crossing points. Other mechanisms may be utilised to trigger warning and caution to slow down including line marking on the shared trail as well as widening and sealing of road shoulders for increased visibility and safety.
- Visibility. Sections of the shared trail alignment include dense vegetation which obstructs sightlines and creates a poor perception of safety. Uplifting and pruning of vegetation is proposed to support clear sightlines between the shared trail, the road and nearby residential properties, maximising passive surveillance. The vegetation buffer within Serendip Sanctuary

and the proposed biolink corridor will require ongoing vegetation maintenance to ensure optimal visibility for sightlines is maintained; benefiting user experience, sense of visual 'openness' and perceptions of safety within the shared trail corridor.

- Wildlife. A section of the proposed alignment passes through Serendip Sanctuary where animals are semi-free roaming. Wildlife fencing is proposed between the wildlife reserve and shared trail to manage animal movement and prevent conflict with shared trail users. Evaluation of the parallel experiences of the shared trail and Serendip Sanctuary is recommended to ensure function and management of both spaces are able to be maintained as needed. Access gate design and arrangement to be evaluated to confirm it meets requirements for secure access and risk mitigation for a wildlife enclosure.
- User navigation. The shared trail proposes wayfinding signage and ESTA signage at gated access points into Serendip Sanctuary. The objective is to assist with user navigation and orientation, including understanding of distances to key destinations and exact location identification in the case of emergency service callouts.
- Operating hours. As a publicly accessible open space corridor, the shared trail is ideally utilised during daytime hours only. Serendip Sanctuary maintains operating hours and gated access is closed to the public after hours. Pathway lighting is not recommended for the shared trail as it may encourage ongoing use after dusk. The design considerations in the event that users are on the trail in the evening include a clear and direct path of travel

and permeability of vegetation to maximise sightlines and passive surveillance.

- Spatial experience and comfort. Due to the site constraints and mitigation of impacts, and cost, the shared trail width is proposed as a 2.5m sealed concrete surface. The width is the minimal width for typical shared paths, however, is narrower than the 3-3.5m width recommended for a Shared User Path Type 2 for Recreation within the Supplement to AGRD Part 6A document for Paths for Walking and Cycling, Department of Transport, 2021. Optimal minimum widths increase the perceptions of safety and perceived comfort for shared users and multiple users at any given time. Given that the existing shared trail along Hovell's Creek is 2.5m width, the continuation at 2.5m width is considered acceptable.

Alternative Concept

- Reduced separation. The Alternative Concept locates the shared trail within the road reserve along Flinders Avenue, instead of within potential acquired land, reducing the separation between shared trail and road users. To minimise risks to shared trail users vehicle mitigation options such as protective barriers should be explored. Traffic engineer and risk assessment consultants to provide input and advice based on recommendations from VicRoads

Detail Design

In Detailed Design, it is recommended that a detailed risk assessment for CPTED, traffic and road safety is completed for the project by a qualified Traffic Engineer and Risk Assessment consultants for due diligence and feasibility.



FUTURE DESIGN AND WORKS

Following on from this report, future design and works for the Lara to You Yangs Shared Trail will require further due diligence and compliance with legislative requirements, stakeholder consultation and investigation to determine implications and impacts on the environmental and cultural heritage impacts as a result of on site works to implement the shared trail.

Legislative Requirements (Environment & Permit Requirements)

The project will require permission under the *Planning and Environment Act*, *Flora and Fauna Guarantee Act* and *Environmental Protection and Biodiversity Conservation Acts*, as well as further ecological work, including targeted surveys for the effected flora/fauna species as identified within reports for the project area. Some communities and species that could occur in the project area are very rare or critically endangered. The project must prioritise avoiding environmental impacts in accordance with legislative requirements and advice provided.

Planning & Environment Act

Given the shared trail length and ecological value present across an extensive area a planning permit would be required under 52.17, ESO4 and PCRZ. Consent will also be required from Parks Victoria as part of the application.

Flora & Fauna Guarantee Act

The presence of Western Basalt Plains Grassland community and habitat for the Tussock Skink triggers a planning permit application to the Department of Energy, Environment and Climate Action regional office and a subsequent Flora and Fauna Guarantee Act permit.

Environmental Protection & Biodiversity Conservation Act

As a result of Natural Temperate Grasslands of the Victorian Volcanic Plain (NTGVVP) community being present, as well as, potential habitat for Spiny Rice Flower, Striped Legless Lizard and Golden Sun Moth. (*Lara Shared Trail: Ecological Issues and Opportunities, June 2023*) The report notes that, with the information available to date, the proposal will require a referral to the federal government under the EPBC Act.

Shared Trail Impacts

Planting

Tree, understorey and grassland planting in future to consider identified EVCs across the alignment as identified within the Ecological Report (*Lara Shared Trail: Ecological Issues and Opportunities, June 2023*). As well as, additional information from Parks Victoria and any legislative requirements.

Construction Impacts

In preparation for construction, during and post-construction make good and clean up shall consider low impact construction techniques and no-dig methodology to minimise impacts on environment and adjacent areas. This is to be considered in conjunction with standard requirements under Council regulations, EPA, Australian Standards and NCC. This includes traffic management, safe work practices and consideration of wildlife impacts and separation.

An appointed and qualified Arborist and Ecologist are to provide onsite advice and oversee the protection of existing vegetation and trees.





NEXT STEPS

We share City of Greater Geelong's vision of connectivity and sustainability. We share your values and believe in creating open space linkages that bring people together and provide better access for all in the great outdoors.

We understand that the City of Greater Geelong is passionate about ensuring future resilience in open space planning and accountability to the environment. The project aligns with many of our key values - the desire to support communities and to create resilient landscapes that offer safe access, whilst protecting the natural environment around us.

This initial shared trail assessment and analysis considers the experiences on site walking the alignment, discussion with stakeholders, and context of strategic background information, and technical assessments. With a range of alignments that have been considered, and the identification of a preferred alignment for the project, moving forward we understand that this will be subject to further review and consideration of a range of impacts and implications, including further assessments.

The proposed trail alignment through Serendip Sanctuary and private land acquisition is demonstrated in further detail within this concept design phase. The City will review and consider the concept outcomes, risks and implications presented.

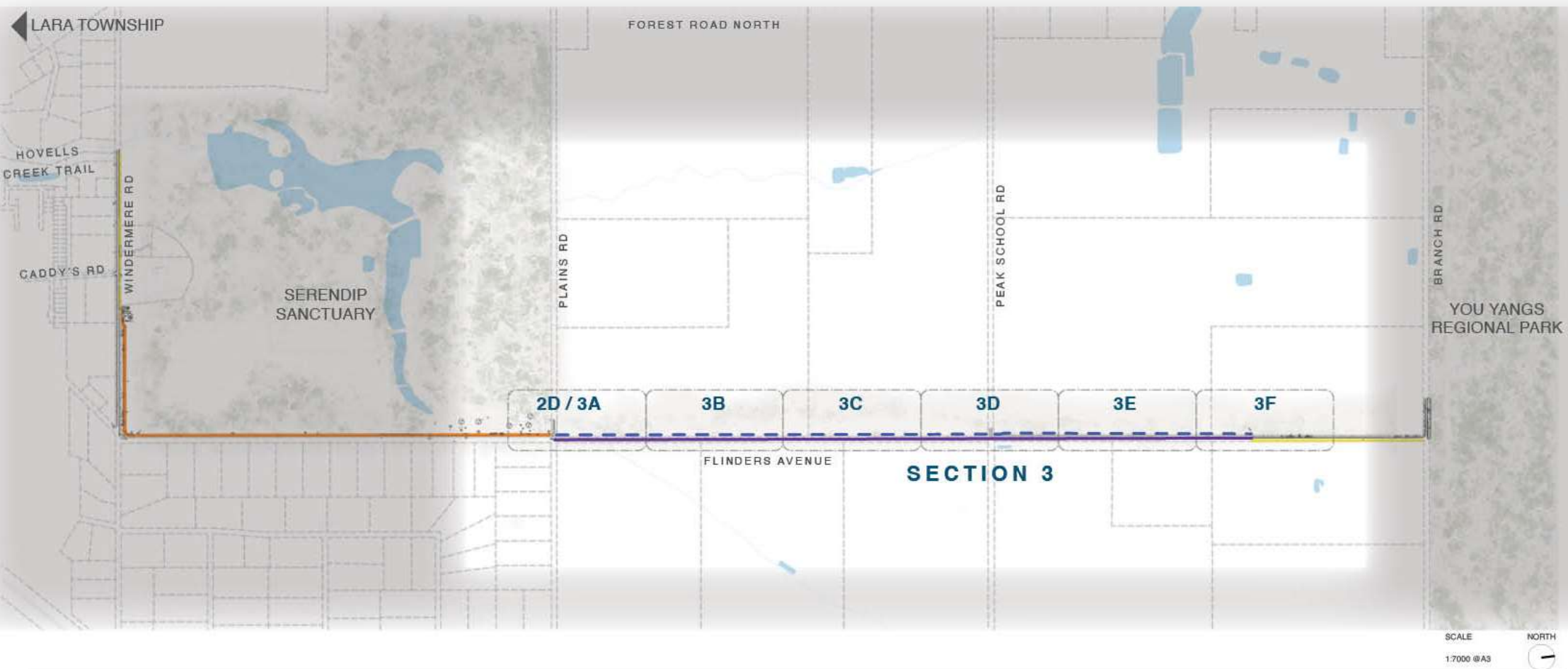


APPENDIX 2: CONCEPT - ALTERNATIVE ALIGNMENT

Key alignments within the concept are:

- SHARED TRAIL ALTERNATIVE WITHIN ROAD RESERVE
- - - SHARED TRAIL WITHIN POTENTIAL ACQUIRED LAND
*REFER TO CONCEPT

The alternative alignment differs in Section 3 where the shared trail is located within the road reserve along Flinders Avenue instead of within potential acquired land. This alignment is proposed in the event that land acquisition is not possible.



PLANS 2D/3A & 3B

LEGEND

EXISTING

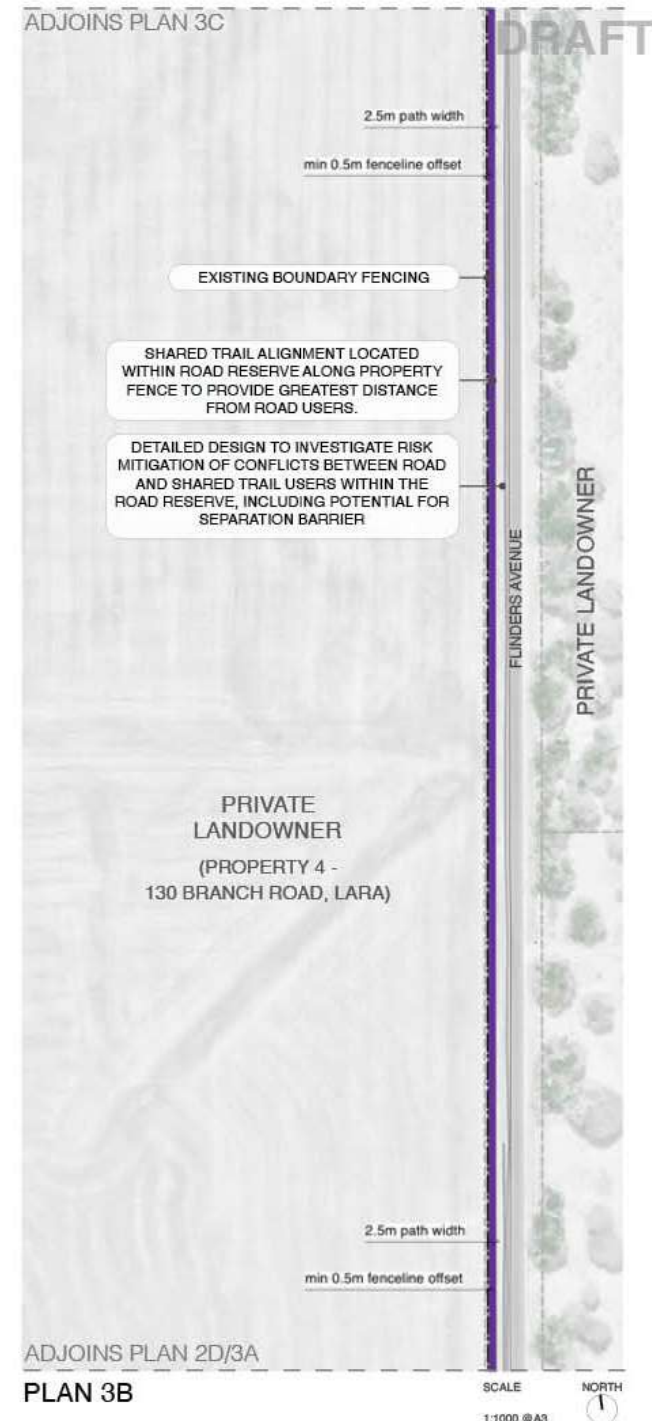
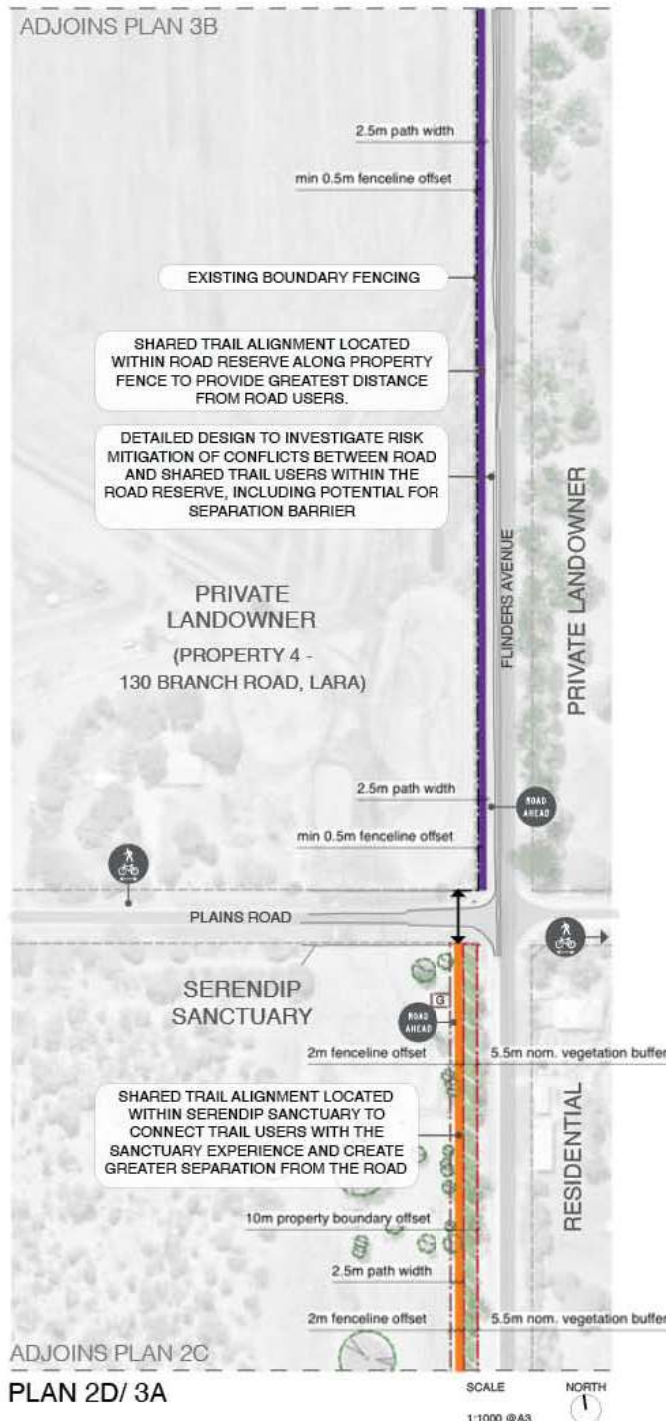
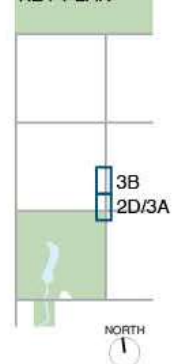
- VEGETATION
- EXISTING / UPGRADED BOUNDARY FENCE
- PROPERTY BOUNDARY

PROPOSED

- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN SERENDIP SANCTUARY
- 2.5M WIDE CONCRETE SHARED TRAIL ALTERNATIVE WITHIN ROAD RESERVE
- ROAD CROSSING
- PROPOSED WILDLIFE FENCING
- GATE WITH ESTA MARKER
- PROPOSED NEW FARM FENCING
- UPLIFTED VEGETATION
- SHARED TRAIL CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 120-200M FROM CROSSING (IN ACCORDANCE WITH VICROADS)
- ROAD CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 30M FROM ROAD (IN ACCORDANCE WITH VICROADS)

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

KEY PLAN



PLANS 3C & 3D

LEGEND

EXISTING

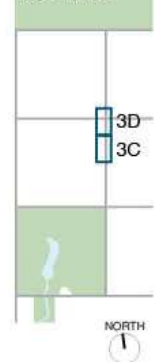
-  VEGETATION
-  EXISTING / UPGRADED BOUNDARY FENCE
-  PROPERTY BOUNDARY

PROPOSED

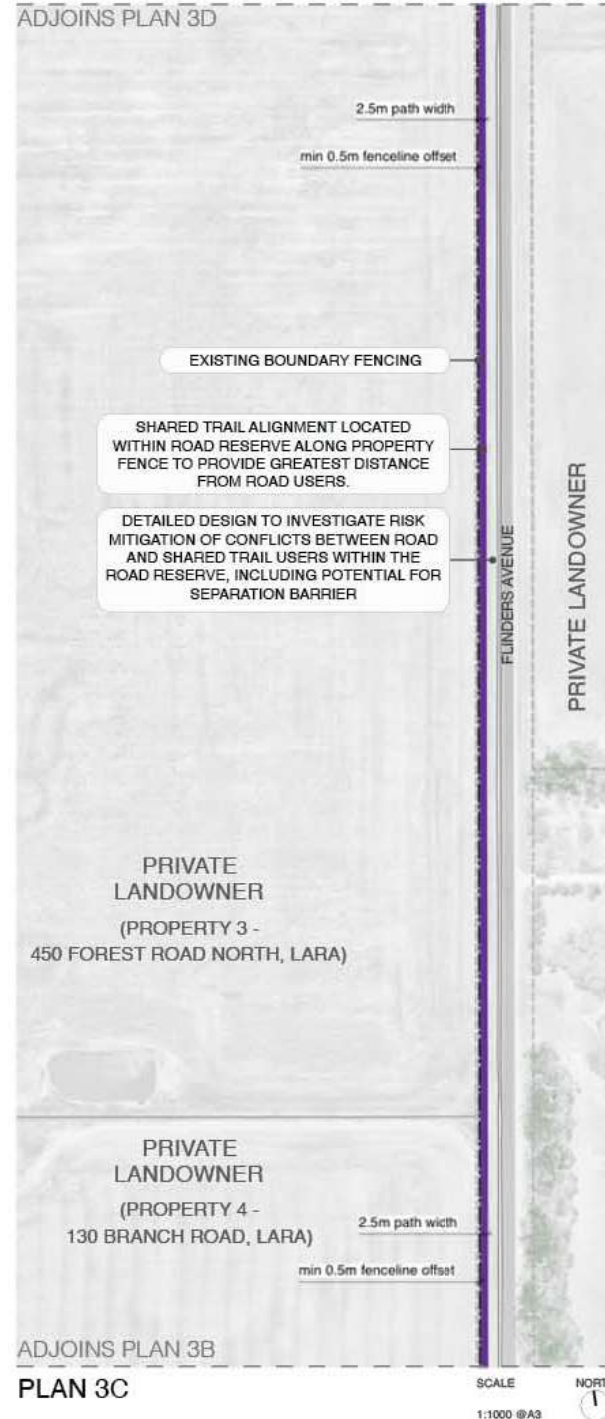
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-  ROAD CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 30M FROM ROAD (IN ACCORDANCE WITH VICROADS)

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

KEY PLAN



ADJOINS PLAN 3D



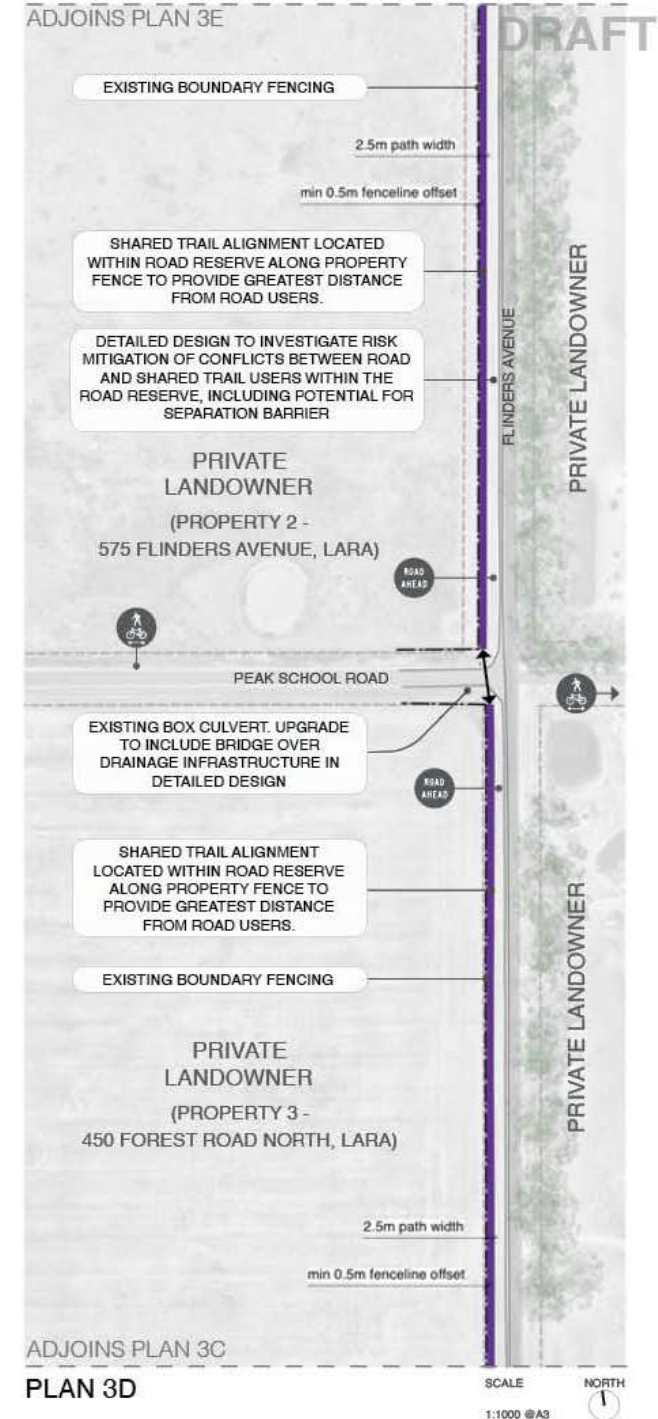
ADJOINS PLAN 3B

PLAN 3C

SCALE
1:1000 @A3

NORTH

ADJOINS PLAN 3E



ADJOINS PLAN 3C

PLAN 3D

SCALE
1:1000 @A3

NORTH

PLANS 3E & 3F

LEGEND

EXISTING

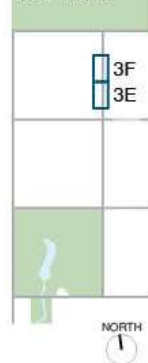
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PROPOSED

- 2.5M WIDE CONCRETE SHARED TRAIL ALTERNATIVE WITHIN ROAD RESERVE
- 2.5M WIDE CONCRETE SHARED TRAIL WITHIN ROAD RESERVE
- ROAD CROSSING
- SHARED TRAIL CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 120-200M FROM CROSSING (IN ACCORDANCE WITH VICROADS)
- ROAD CROSSING AHEAD WARNING SIGN OPPORTUNITY APPROX. 30M FROM ROAD (IN ACCORDANCE WITH VICROADS)

NOTE: REFER TO APPENDIX 1
CONCEPT - ALTERNATIVE ALIGNMENT

KEY PLAN



ADJOINS PLAN 3F



ADJOINS PLAN 3G

