



City of Nedlands

Technical Services Reports

Committee Consideration – 9 July 2019
Council Resolution – 23 July 2019

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TS14.19	Boundary Roads Agreement – Town of Claremont
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Committee	9 July 2019
Council	23 July 2019
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil.
Director	Maria Hulls – Acting Director Technical Services
Attachments	1. Draft Boundary Roads Agreement – City of Nedlands and Town of Claremont

Executive Summary

In August 2017, the City conducted several meetings with the Town of Claremont staff to work through an agreed arrangement for the way works are conducted and financed on roads that are shared by both Councils.

In September 2018 a final draft document was sent to the Town of Claremont for comment and following an evaluation period a final draft was approved by both the City of Nedlands and the Town of Claremont in June 2019.

This document (refer Attachment 1) has been presented to the Town of Claremont at the Ordinary Council Meeting of 18 June 2019 and was approved. The document is being presented to the City of Nedlands at its Ordinary meeting of Tuesday 23 July 2019, with recommendation to approve.

Recommendation to Committee

That Council authorise the Mayor and Chief Executive Officer to sign the Memorandum of Understanding for the Boundary Road Agreement between the City of Nedlands and the Town of Claremont as detailed in Attachment 1 of this report.

Discussion/Overview

Background

Following a discussion at the WESTECH meeting in August 2017, the City of Nedlands presented the Town of Claremont with a draft document “Boundary Roads Agreement” with a Memorandum of understanding (MOU). The MOU details the roads shared with the Town of Claremont and the proposed understandings attributed to these roads.

There are twelve roads in the City of Nedlands that comes under the effect of this agreement (Refer Appendix 2 - Memorandum of Understanding).

History shows that past works conducted on these boundary roads were sometimes completed in isolation with each Council having their own set of service levels, forward works programming, style guides, tree selection, verge treatments etcetera.

The MOU presents an opportunity to not only provide consistency, but to open channels of communication between the LGA's to allow for better forward planning for both maintenance and capital works projects.

Key Relevant Previous Council Decisions:

Nil.

Consultation

The City of Nedlands Staff
The Town of Claremont Staff

Budget/Financial Implications

The City of Nedlands has six projects scheduled over the next five years that will affect this agreement.

Road	Project	Year	Funded by	Proposed Budget
Loch Street	Stirling Highway - Carrington Street	2019/2020	MRRG \$155,000 City of Nedlands \$15,500 Town of Claremont \$15,500	\$186,000
Alfred Road	Montgomery Avenue to Adderley Street	2022/2023	MRRG \$100,000 City of Nedlands \$10,000 Town of Claremont \$10,000	\$120,000

Alfred Road	Adderley Street to Rochdale Road	2022/2023	MRRG \$100,000 City of Nedlands \$10,000 Town of Claremont \$10,000	\$120,000
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Any future changes to intersections on boundary roads, either civil or traffic light sequencing, must be able to meet the warrants set by Main Roads WA. Should changes be approved then grant funding will be available to assist with costs.



**BOUNDARY ROADS
BETWEEN THE CITY OF NEDLANDS AND TOWN OF CLAREMONT**

1. The City of Nedlands and the Town of Claremont agree to the division of works responsibilities for boundary roads shared by the two Local Governments as detailed in the attached explanatory notes and schedule.
2. The Memorandum of Understanding shall remain in place indefinitely until amended by resolution of both Councils or terminated by resolution of either Council.

Signed

City of Nedlands (Approved by Council on)

Mayor Date

CEO Date

Town of Claremont (Approved by Council on 18 June 2019)

Mayor Date

CEO Date

BOUNDARY ROADS
MEMORANDUM OF UNDERSTANDING
BETWEEN CITY OF NEDLANDS AND TOWN OF CLAREMONT

EXPLANATORY NOTES

1. BACKGROUND

The City of Nedlands and Town of Claremont share local government boundaries across seven different road reserves. The boundaries generally follow one side of a local or district road reserve.

The allocation of responsibility for the care and control of boundary road is governed by the Local Government Act (1995), section 3.53, which states that the control and management of a reserve partially within 2 or more Local Governments shall be as agreed by the Local Government. If agreement is not achieved, the issue is to be referred to the Minister for resolution.

In the past, the understanding between Local Governments on the division of operational and capital responsibilities for works on these roads has been largely verbal with limited documentation.

The allocation of boundary roads responsibility for asset management and grant funding purpose has been clearly defined through the MRWA road inventory, however this division is not necessarily the most practical arrangement for operational activities.

2. PURPOSE

The purpose of this Memorandum of Understanding between the two Local Governments on the division of works responsibilities for boundary roads to:

- Ensure that all categories of works for all sections of the boundary roads receive the same standard of attention as non-boundary roads.
- Clearly define the division of works responsibilities on these roads between the two Local Governments.
- Clearly articulates the processes for dealing with ratepayer requests that have implications across LGA boundaries, in particular land development related matters.

3. PRINCIPLES

The division of responsibilities as describes in the document are based on the following principles:

- 3.1 That the long-term interests of residents and road users shall be paramount.
- 3.2 That operational tasks and costs e.g. road maintenance, median maintenance, are shared in an equal and practical manner.
- 3.3 That capital works are arranged in a cost-effective manner.
- 3.4 That the MRWA road inventory shall be the basis for allocation of capital works responsibilities (initiating, investigation, preparation of funding applications, design and construction) on boundary roads between Local Governments.
- 3.5 That the “own resources” funding component of all capital road works on all sections of the boundary roads shall be shared equally between the two Local Governments, unless agreed otherwise.
- 3.6 That each capital road works project shall be subject to negotiations by the Local Governments on a specific cost sharing agreement.
- 3.7 That both Local Governments will assist in expediting the implementation of capital works as proposed by the other Local Government.
- 3.8 That both Local Governments will advise of future boundary road projects at the earliest opportunity.

4. IMPLEMENTATION OF THE MEMORANDUM OF UNDERSTANDING

Successful implementation of this agreement will require preparedness on the part of both Local Governments to act in good faith to achieve the objectives. Communication regarding specific projects will be required as follows:

- 4.1 Where maintenance requirements discovered by one Local Government extend into the other Local Government area, the other Local Government shall be informed and requested to take appropriate action.
- 4.2 For capital works involving only one Local Government (e.g. verge street lighting, verge path construction), The other Local Government shall be notified of the intentions in order to be made aware of the works.
- 4.3 For capital works involving the expectation of funding contributions from other Local Government, the initiating Local Government shall liaise, negotiate and reach agreement with the other Local Government on the scope of works including design, grant application, timing and funding contribution for the project within a timeframe suitable to both Local Government’s budget preparation process.

- 4.4 Where a specific project agreement cannot be reached, the initiating Local Government can:
- Opt to proceed with the project at its own expense and refer the issue to Minister for resolution, or
 - Defer the project pending a determination from the Minister.
- 4.5 The specific project agreements shall be kept separate and independent from other road works projects or other boundary issues.
- 4.6 Where there are works related to adjacent land development, the Local Government responsible for the land development shall lead the approval process within the road reserve, including but not limited to crossover approval, street tree removal etc. The lead Local Government will consult with the other Local Government with respect to their assets or policies.

5. SCHEDULE

The attached schedule (Appendix 1.) outlines the division of responsibilities for the various categories of works.

6. DEFINITIONS

Definitions of terms used in the schedule are as follows:

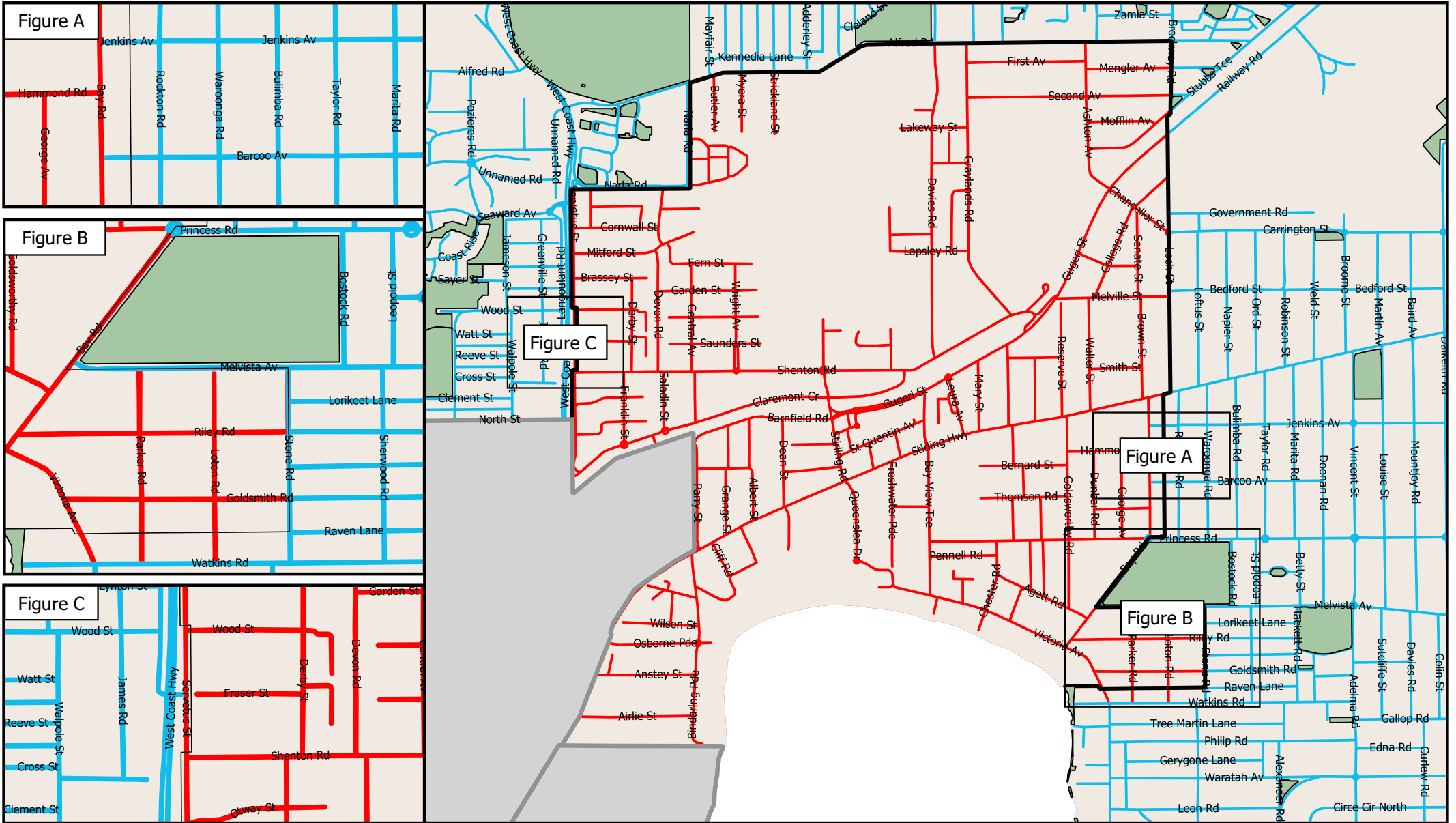
- Council Boundary – Municipal boundary as defined by Landgate.
- Maintenance Boundary – the centreline of each road reserve, unless otherwise agreed (see Appendix 2).
- Own Resources Costs – the financial contributions made by the Local Governments from their own funds towards the task / project, as distinct from the grant funding.
- Capital Costs – the Capital costs for a specific project, which shall include all investigation, surveying, design and construction costs.
- Road Maintenance – pothole repairs, minor kerbing replacement, sweeping, crack patching, repair / cleaning of drainage facilities, etc.
- Verge Maintenance – mowing, tree lopping, rubbish removal, levelling.
- Verge control – enforcement of verge and parking local laws.
- Median and island maintenance - mowing, rubbish removal, tree lopping, landscaping repairs, brick paving / concrete slab repairs, sweeping, drainage cleaning, reticulation operations, minor kerbing replacement.

- Capital Road works – asset creation Works on the road carriageways and medians. Not including street lighting or paths on verges.
- Emergency Works – works carried out within the road reserve that require immediate action.




BOUNDARY ROADS WORKS MEMORANDUM OF UNDERSTANDING			
CITY OF NEDLANDS & TOWN OF CLAREMONT			Last Updated: 20 June 2019
Item	ROAD	Section	Location
1	Council Boundary	Raven Lane	(Parker-Stone) Dalkeith
2	Council Boundary	Stone Road	(Raven-Melvista) Nedlands
3	Council Boundary	Melvista Avenue	(Stone-Bay) Nedlands
4	Council Boundary	Bay Road	(Melvista to Princess) Nedlands
5	Council Boundary	Princess Road	(Bay to Rear No. 51 Rockton) Nedlands
6	Council Boundary	Brockway Road	(Stubbs-Alfred) Claremont
7	Council Boundary	Alfred Road	(Brockway-Narla) Mt Claremont-Swanbourne
8	Council Boundary	Narla Road	(Alfred to Servetus) Swanbourne
9	Council Boundary	Servetus Street	(Narla-West Coast Hwy) Swanbourne
10	Council Boundary	Servetus Street	(Shenton-Wood) Swanbourne
11	Council Boundary	Loch Street	(Railway-Stirling) Nedlands-Claremont
12	Council Boundary	Stirling Highway	(No. 180 Loch) Nedlands
Item No.	WORKS ITEM	ROAD	AGREED WORKS RESPONSIBILITIES
			CITY OF NEDLANDS TOWN OF CLAREMONT
1	Road Reserve Capital Works	1,2,3,4,5,6,7,8,10,11	Initiate works on all roads sections as listed in Councils MRWA inventory. 100% contribution as delineated by Maintenance Boundary.
2	Road Reserve Maintenance Works	1,2,3,4,5,6,7,8,10,11	100% responsibility for maintenance works on all road sections as delineated by Maintenance Boundary.
3	Verge Maintenance and Regulation	1,2,3,4,5,6,7,8,10,11	All verge maintenance and regulatory functions are 100% responsibility as delineated by Maintenance Boundary, except for 8 where CoN to be responsible for permitting of private works.
4	Path Maintenance	1,2,3,4,5,6,7,10,11	All footpath maintenance as delineated by Maintenance Boundary.
5	Traffic Studies, Road Design, & Safety Audits	1,2,3,4,5,6,7,8,10,11	Initiate design works on all roads sections as listed in Councils MRWA inventory. 100% contribution as delineated by Maintenance Boundary or as otherwise agreed.
6	Roundabouts, Entry Statements, Median and Island Maintenance	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary or as otherwise agreed.

7	Street Trees	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary or as otherwise agreed.
8	Irrigation Infrastructure	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary or as otherwise agreed.
9	Underground Power	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary or as otherwise agreed.
10	Side Street Intersection Upgrades	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary or as otherwise agreed.
11	Parking Control Signs	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary.
12	Street Signs	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary.
13	Direction Signs	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary.
14	Street Lighting Operations	1,2,3,4,5,6,7,8,10,11	100% contribution as delineated by Maintenance Boundary.
15	Emergency Works	1,2,3,4,5,6,7,8,10,11	Where emergency works are carried out by either party, the cost associated with those works are to be 100% as delineated by Maintenance Boundary.

City of Nedlands and Town of Claremont Boundary Road Agreement - Boundary Maintenance Lines



Map Key

-  Town of Claremont/City of Nedlands Boundary
-  City Of Nedlands Maintenance
-  Town of Claremont Maintenance

Map Notes

Maintenance boundaries adhere to road centrelines except where otherwise shown.
 Fig. A: Jenkins and Barcoo Avenues
 Fig. B: Stone Rd, Melvista Av
 Bay Rd, Loton Rd Parker Rd, Victoria Av
 Fig. C: Servetus Street

0 200 400 600 800 m



Scale 1:20 000 @ A4
 Insets 1:10 000 @ A4
 Created By: N. Day,
 City of Nedlands
 Date Created: 10.04.2019
 Updated: 28.05.2019

TS15.19	Quintilian Road – Safe Active Street Investigation Results
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Committee	9 July 2019
Council	23 July 2019
Applicant	City of Nedlands
Employee Disclosure under section 5.70 Local Government Act 1995	Nil.
Director	Maria Hulls – Acting Director Technical Services
Attachments	1. Cross section of Options

Executive Summary

At the Ordinary Meeting of Council on 23 April 2019, Council requested that the Administration investigate and report on the potential for Quintilian Road to be developed as a Safe Active Street. Following discussions with Department of Transport, the Administration evaluated 3 options as follows:

1. Shared Path with narrowing of existing roadway from 7.2m to 6m and parallel parking on northern verge;
2. Safe Active Street (SAS) narrowing roadway to 4.5m with parallel parking on the northern side only;
3. Shared Path and Safe Active Street (Options 1 and 2 combined).

The Administration has reviewed each option in consideration of suitability, cost, timeframe to complete, safety and community feedback received from previous consultations. The Administration has made a recommendation and Council support is now sought.

Recommendation to Committee

Council supports the development of a shared path on the northern verge of Quintilian Road incorporating parallel parking bays along the northern verge and narrowing of the existing roadway to 6 metres.

Discussion/Overview

Background

Quintilian Road is a local access road, approximately 490m in length and is one of four roads within the City of Nedlands that connects Brockway Road to Stubbs Terrace in Mt Claremont. There is a mix of on-street parking, 90° parking and angled parking bays which caters for commuters, the School, residents and Irwin Barracks.

A summary of the recent traffic count data is summarized in Table 1. These results have been collected to assess the effectiveness of speed plateaus installed in early 2018.

Table 1. Quintilian Road Traffic Count History

Traffic Measure	March 2017	March 2018	October 2018	March 2019	Change from March 2017
Average Daily Volume (5 Day)	1993	2300	1970	1749	Decreased by 12.2%
85 th Percentile Speed (km/h)	55.8	51.5	51.5	51.0	Decreased by 8.6%
Proportion Commercial Vehicles	4.3%	5.2%	5.0%	4.8%	Increased by 0.5%

It is noted that the March 2018 traffic counts saw an increase in traffic which can be attributed to the temporary closure of the Ashton Avenue Bridge. A second traffic count taken in October 2018, approximately one month after the Ashton Avenue Bridge was re-opened, supports this. The most recent report in March 2019 has demonstrated a continued gradual reduction since March 2018. Both the speed and volumes are within acceptable limits for a local access road.

Bike Plan Staging

In 2017, the Administration identified an opportunity to install a shared path along Brockway Road and Quintilian Road as part of the WA Bicycle Network (WABN). The provision of a shared path on Brockway and Quintilian Road would provide:

- A link to the Underwood Avenue and the Perth-Fremantle Principal Shared Path (PSP)
- A recreational/commuter link from Floreat to Stubbs Terrace/Railway Road PSP
- Bicycle access to schools and nearby community facilities
- Safe path for commuters using bus services

It is proposed to complete the shared path in 3 stages:

1. Brockway Road – Underwood Avenue to Lemnos Street
2. Brockway Road – Lemnos Street to Quintilian Road
3. Quintilian Road

Design work for the shared path has been completed over the 2018/2019 financial year. WABN Grant Funding from the Department of Transport for construction of the shared path has been confirmed for Stages 1 and 2. These have been scheduled into the City's Capital Works Program for the 2019/2020 (Underwood Avenue to Lemnos Street) and 2020/2021 (Lemnos Street to Quintilian Road) financial years respectively.

A shared path design has been completed for Stage 3 (Quintilian Road) but is subject to whether Council wishes to pursue a Safe Active Street. Further community engagement will also be undertaken prior to construction. It is proposed to complete Stage 3 in either the 2020/2021 or 2021/2022 financial year at the latest to maintain continuity of the project.

Safe Active Street Investigation

Safe Active Streets are cycle routes on quiet local streets designed to allow vehicles and cyclists to share the street safely. The design of a Safe Active Streets aims to reduce speeds to 30km/h to encourage a slower speed environment that is safe for all users.

As requested by Council on 23 April 2019, the Administration has approached the Department of Transport in relation to the possibility for Quintilian Road to be developed as a Safe Active Street. Following feedback from the Department of Transport, the Administration assessed 3 possible options:

1. Shared Path with narrowing of existing roadway to 6m and parallel parking on northern verge;
2. Safe Active Street (SAS) narrowing roadway to 4.5m with parallel parking on the northern side only;
3. Shared Path and SAS (Options 1 and 2 combined).

Please refer to Attachment 1 for a typical cross section of each option. A cross section of the existing roadway is included in Attachment 1 for comparison.

It is noted that embayed parallel parking on both sides of Quintilian Road was explored for the Safe Active Street options. However, due to the close spacing of crossovers on Quintilian Road, there is insufficient space to create parallel embayed parking to offset the loss of on-street parking.

Each of these options will require a separate application, review and approval by Department of Transport. If approved by Department of Transport, the options will be 50% funded by the Department of Transport and 50% City of Nedlands funded.

Each option has their own advantages and disadvantages which are summarized in Table 2.

Table 2. Advantages and Disadvantages of Each Option

Option	Advantages	Disadvantages
1	<ul style="list-style-type: none"> • Lowest cost. • Improves pedestrian and cyclist safety. • Can be delivered as early as 2020/2021 • Possible speed reduction. • Minimises loss of parking 	<ul style="list-style-type: none"> • Speed reduction from narrowing existing roadway to 6m may be limited. • Loss of 30 parking bays.

2	<ul style="list-style-type: none"> • Safe road environment for all road users. • Better speed reduction than Option 1. • Existing speed plateaus help reduce cost. 	<ul style="list-style-type: none"> • Expensive. • Time consuming to design and build with delivery in 2021/2022. • Speed reduction may be limited due to existing speed plateaus. • Quintilian Road may not be long enough to encourage slower speed behavior. • Loss of 57 parking bays.
3	See advantages listed for Option 2.	See disadvantages listed for Option 2.

Parking

Currently, there are approximately 63 parking bays on the northern verge and 37 bays on the southern side of Quintilian Road. A parking survey conducted in April 2018 found maximum occupancy at 60%. The average occupancy is 61% between Tuart Entrance and Stubbs Terrace. This is higher than average occupancy of 30% observed for the section between Brockway Road and Tuart Entrance.

The estimated number of parking bays provided and lost for each proposed option is summarized in Table 3.

Table 3. Parking bays provided and lost

Option	Number of bays provided	Number of bays lost
1	70	30
2	43	57
3	43	57

Option 1 would allow 33 parallel bays to be installed on the northern verge whilst retaining the 37 on-street parking spaces on the southern side.

Options 2 and 3 would provide the same 33 parallel bays as Option 1 but would lose 27 on-street spaces on the south side. Some parking outside Quintilian School can be retained however this would involve extra works to relocate the existing footpath. This would result in a loss of 4 out of the 11 existing parallel bays in order retain 3 existing verge trees. Additionally, the eight 90° bays outside of the school would need to be converted into approximately 3 parallel parking bays. Angled parking cannot be considered for a Safe Active Street due to limited space for vehicle maneuverability.

Previous Consultation

Feedback received from previous consultations can provide an indication on community priorities. Two separate consultations have been completed in the last 2 years in relation to:

1. Proposed traffic calming installation;
2. Proposed partial road closure.

A summary of the key issues is summarized below:

- Quintilian Road is an important link to the City and the railway station.
- Perceived speeding issue exists from residents of Quintilian Road and Quintilian School.
- Lack of support for speed plateaus stem from concerns around noise and discomfort for cyclists.
- Congestion near the school.
- Commuter parking at the east end of Quintilian Road creating visibility issues.
- Requests to provide safe cyclist access from Camelia Avenue to Quintilian Road.
- Any proposed closures would only serve to redirect existing traffic issues.

Administration Recommendation

All options considered will provide improvements to pedestrian and cyclist safety with potential for further traffic calming. In consideration of cost, timeframes, safety and previous community feedback, the Administration recommends progressing with Option 1 for the following reasons:

- The most cost-effective solution to achieving improved pedestrian and cyclist safety out of the 3 options.
- Provides the most parking out of the 3 options.
- Improves safety of an important link for the community to the City and the railway station for all road users.
- Provide cyclists with an alternative to cycling over speed plateaus.
- Realignment of parking bays will improve visibility and reduce likelihood of conflict between road users.
- There is the possibility to deliver this option as early as the 2020/2021 financial year

Option 2 is not recommended as there is little additional benefit to be gained for the cost and time required to develop. Quintilian Road is comparatively short (490m) compared to the Safe Active Street that is proposed for Jenkins Avenue and Elizabeth Street (2300m). This short length may not be long enough to induce the slower speed behavior required in a Safe Active Street. The presence of existing speed plateaus may also limit any further speed reductions. Additionally, this option would also result in the loss of on-street parking on the southern side which may be used by visitors to residents on Quintilian Road.

Option 3 is not recommended due as it is the least cost-effective option and involves unnecessary cycle path duplication.

Key Relevant Previous Council Decisions:

Ordinary Meeting of Council 23 April 2019, Item TS07.19

“That Council:

- 1. Does not support the proposed left-out only partial road closure of Quintilian Road at Brockway Road;*
- 2. Supports the provision of flashing 40km/h speed zone signs in Quintilian road; and*
- 3. Council asks the Administration to work with the Department of Transport to investigate the potential for Quintilian Road to be developed as a Safe Active Street. Administration is asked to report on the results of this Investigation to Council.”*

Budget/Financial Implications

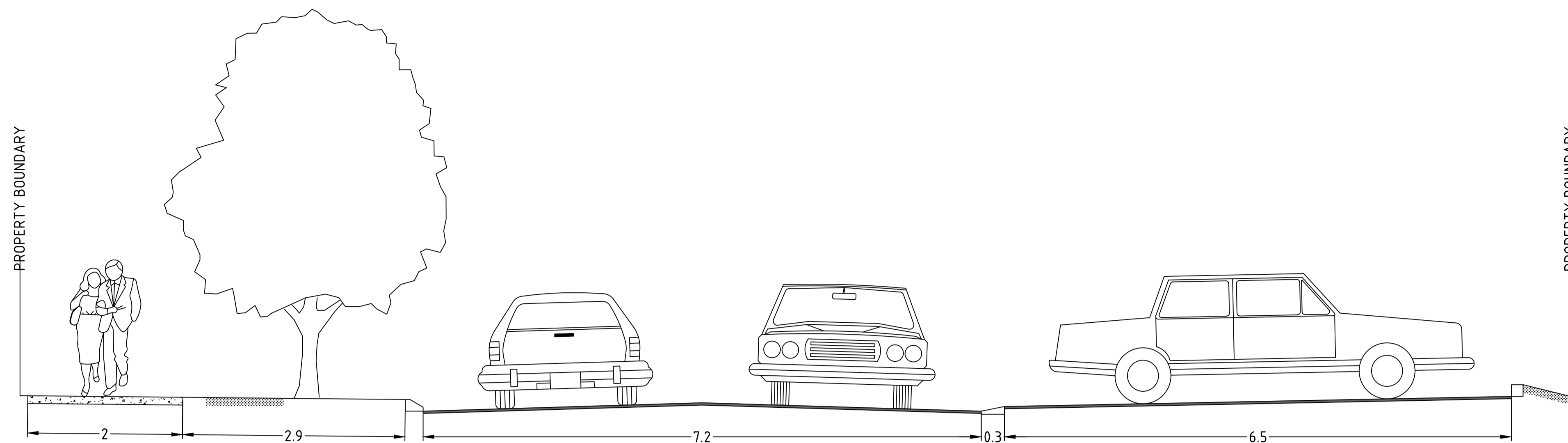
A summary of the estimated cost of each option is summarized in Table 4. If application to Department of Transport is successful, funding would be split 50% Department of Transport, 50% City of Nedlands.

Cost estimates for each option have been obtained as follows:

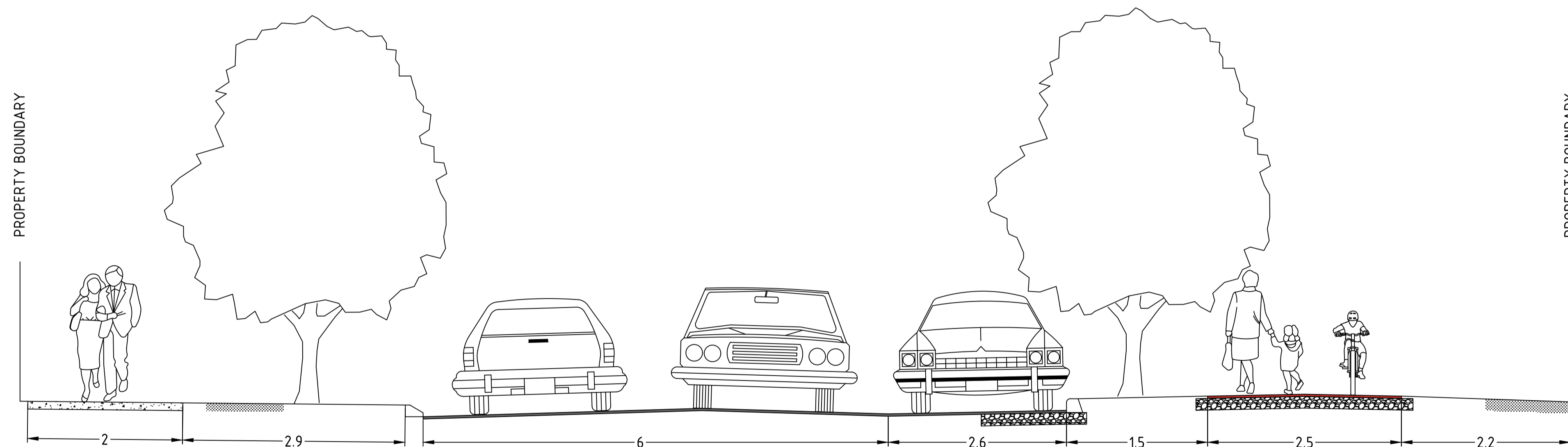
- Option 1 – Through design developed in 2018/2019 financial year
- Option 2 – Through cost of \$870/m derived from \$2 million (pending confirmation of linemarking costs) required to build 2.3km of Safe Active Street along Elizabeth Street and Jenkins Avenue
- Option 3 – Cost of Option 2 + Cost to build shared path on northern verge

Table 4. Cost estimate for each option

Option	Estimated Cost (Order of magnitude +/- 30%)
1	\$310,000
2	\$427,000
3	\$539,000



EXISTING ROAD CROSS SECTION



OPTION 1

CONCEPT ONLY

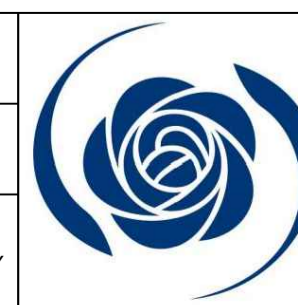
NOTES:

1. ALL DIMENSIONS IN METRES,, UNLESS NOTED OTHERWISE.

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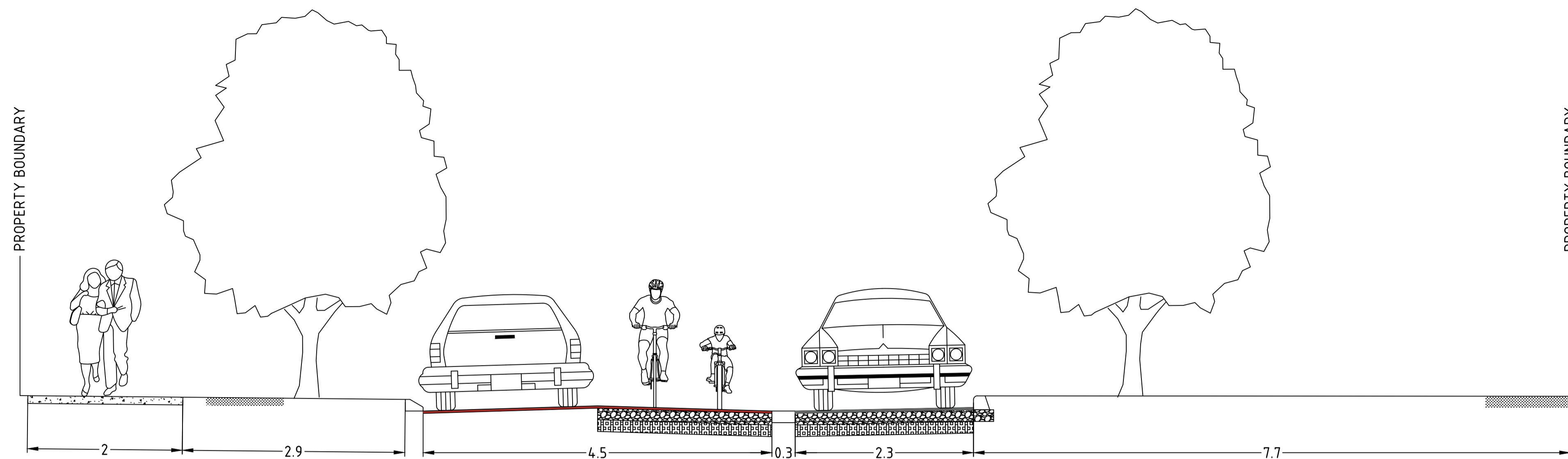
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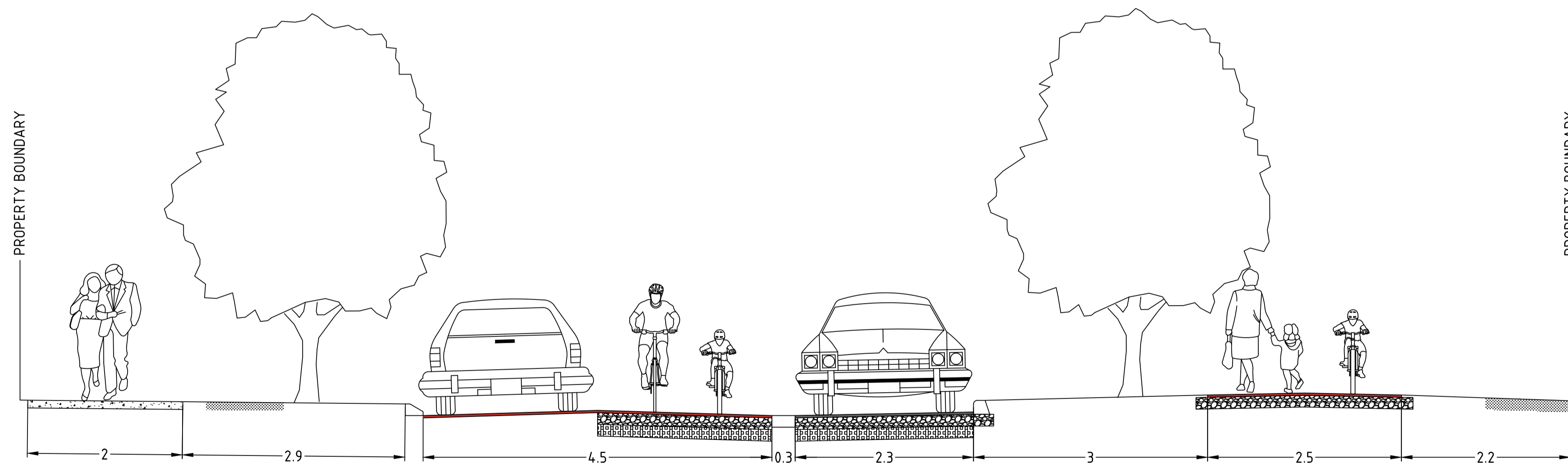
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TITLE:	QUINTILIAN ROAD FUTURE CYCLE PATH OPTIONS CROSS SECTIONS		
A1	DWG NO:	R-2019-40-STAGE3-01-0	SHEET 1 OF 2

SCALE: N.T.S



OPTION 2



OPTION 3

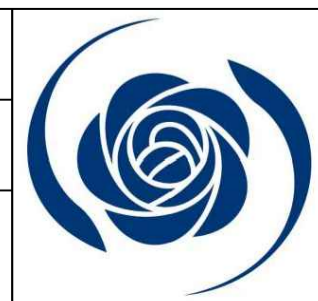
CONCEPT ONLY

NOTES:
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TITLE:	QUINTILIAN ROAD FUTURE CYCLE PATH OPTIONS CROSS SECTIONS		
A1	DWG NO:	R-2019-40-STAGE3-01-0	SHEET 2 OF 2

SCALE: N.T.S