

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2024/1586

Date: 18 June 2025



ATTACHMENT B TRAFFIC ENGINEERING RESPONSE

Statement of Advice

Aura Town Centre – Stage 1

Response to EDQ Further Issues – Traffic Matters

CLIENT: Stockland Development Pty Limited

DATE: 17 April 2025

SLR PROJECT No: 620.041622

REVISION: v1.1

AUTHOR: Brendyn Rheinberger

REVIEWER: Jeffrey Baczynski

Introduction

SLR Consulting (Australia) Pty Ltd (**SLR**) has been engaged by Stockland Development Pty Limited (**Stockland**) to provide transport engineering input to the planning and design of Aura Town Centre.

Economic Development Queensland (**EDQ**) has issued a Further Issues (**FI**) letter dated 24 February 2025, which identifies aspects that are to be clarified by the applicant. Specifically, this correspondence relates to the PDA development application DEV2024/1586 for a Material Change of Use (MCU) and Reconfiguration of Lot (ROL) to facilitate Stage 1 of the Aura Town Centre. EDQ's recent correspondence is reproduced at **Appendix A**.

This statement of advice documents a response to the transport engineering-related matters, noting that some elements have been addressed by others, such as those relating to easements. To aid readability, the clarifications sought by EDQ have been reproduced in *italics* and accompanied by responses provided by SLR.

Amended plans associated with this response are provided at **Appendix B**.

Further Issues Response

Item 3: Cycle Infrastructure

“(a) Bike Lanes

The architectural drawings must be updated to clearly show the 1.5m northbound bike lane and the shared southbound car lane, as outlined in the traffic report. Layout and cross-section drawings are to be amended accordingly. Additionally, linemarking, signage, pavement painting, and street works must be detailed to demonstrate how the shared environment will be established for both the interim and ultimate shared zone.”

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- Main Street is proposed to be a private but publicly accessible street emphasising a place outcome. As a result of the private ownership of the street and the requirements of the Plan of Development (Table 23 DS4.5), the engineering design of Main Street is required to comply with the Australian Standards 2890 (**AS2890**) suite.
- Beyond specific compliance with AS2890, the design of Main Street needs to provide *"Safe and functional access for pedestrians, cyclists and vehicles, that minimises the potential for conflict between users and discourages high speed"*.
- Given that the AS2890 suite has limited guidance in relation to the specific design of cyclist facilities (beyond bicycle parking), SLR's input to the amended architectural plans has sought to maximise safe and functional access for pedestrians, cyclists and vehicles.
- SLR has sought to balance the need to ensure that the street environment is legible for all users whilst not engendering a sense of vehicle dominance due to excessive use of pavement markings and signage.
- The amended architectural plans provided at **Appendix B** depict the 1.8m northbound cycle lane and how it will be delineated effectively from the southbound vehicle travel lane. In addition, **Appendix C** provides further details regarding the intent for signage, linemarking and pavement markings to manage conflict points and enhance wayfinding for cyclists safely.
- In relation to the ultimate arrangement of Main Street, the Buchan plans provided at **Appendix B** illustrate Main Street as a two-way street, with the additional travel lane required created by the removal of the on-street parking spaces on the eastern side and the northbound cycle lane on the western side. In this arrangement, cyclists will share the lane with vehicles to travel either northbound or southbound, which is appropriate given the low speed and low volume environment. To emphasise the intended function of Main Street to road users, appropriate signage and pavement markings would be installed.

"(b) Bike Parking

Provide locations of all visitor bike parking racks on all plans and provide a summary of the number of spaces provided."

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The amended architectural plans provided at **Appendix B** depict the location of all visitor bike parking racks and summarise *the number of spaces provided*.

Item 5: Internal Roads

"Submit updated drawings to demonstrate how the full extent of internal road works and the interim intersection arrangement at the below location can be consistent with a safer ultimate intersection (consider a roundabout or staggered priority intersection as per previous approval). The full extent of internal roads required as part of this stage of development have not been shown on drawings. In particular, the western road link to



intersection 8 has been augmented, where previously it included 1-way roads and 3-way priority intersections, it now appears to promote an ultimate 4-way priority intersection."

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The amended architectural plans provided at **Appendix B** more clearly illustrate how this intersection will be staged by depicting the interim arrangement only to avoid confusion. That is, intersection approaches to the north and south will not be delivered as part of the Stage 1 development and would, therefore, result in an east-west road link only being delivered.
- The northern approach of the intersection will be provided in the future to facilitate a ramp connection to an extended basement car park. The extended basement car park will, in turn, facilitate east-west connectivity at the basement level, therefore removing the need for the interim circulation road east of this intersection and allowing the eastern approach to be converted to the "Western Pedestrian Link" and "Eastern Pedestrian Link".
- As a result, when the northern approach is provided at the subject intersection, the eastern approach will be able to be closed; thus, the intersection will not include more than three approaches concurrently.
- The provision of the southern approach would occur as and when required to support development to the south.

Item 6: Taxi/Rideshare Provision

"Submit plans to show a taxi set-down/rideshare space near the shopping centre entrance."

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The amended architectural plans provided at **Appendix B** show two spaces on Main Street near the casual dining precinct that will be designated for passenger drop-off and collection.

Item 7: Main Street

"Submit plans to demonstrate the following:

- (a) Widen the bend in the northern section of Main Street to comply with AS2890.1 Off-street parking standards, ensuring unobstructed two-way operation.***

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- SLR has reviewed AS2890.1 Section 2.5.2 and followed the methodology for determining a suitable width for the bend on Main Street towards the northern end.



- The current design of Main Street at this bend comprises a width of 7.3m and an outside radius of 11.8m. Table 2.2 shows no minimum roadway width for two-way circulation roadways with an outside radius between 7.6m and 11.9m.
- In lieu of this, SLR has undertaken a swept path assessment simulating two B99 vehicles travelling opposed to one another through this bend. This assessment demonstrates that this bend will accommodate two-way operation when Main Street is converted into its ultimate arrangement. A swept path sketch is provided at **Appendix D** for reference.

(b) Amend Architectural plans updated with Main Street parallel parking bay dimensions in accordance with AS2890.1 requirements."

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The parallel parking spaces along the eastern side of Main Street achieve the dimensions specified by AS2890.1 Figure 2.5. That is, the spaces are 6.3m and 6.6m long with a 3.0m wide adjacent lane.
- To aid confirmation of this, the amended architectural plans at **Appendix B** now include annotated dimensions.

Item 8: Car Parking – Above Ground

"(a) Car Parking Numbers

Submit amended plans demonstrating that the car parking numbers provided are in accordance with the PoD requirements. This will require Stage 1B car parking to be delivered with Stage 1A.

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The Plan of Development (Table 23 DS4.2) requires that:
 - *On site vehicle parking is provided at the rates outlined in Appendix H [Appendix I]. In circumstances where a Traffic Assessment Report is provided that clearly demonstrates a reduced parking demand is expected to be generated by the development or in instances where shared parking arrangements enable greater efficiency in parking utilisation, the applicable parking rates outlined within Appendix H [Appendix I] may be reduced. Any reduction that may be applied is limited to a maximum of 15% variation to the total parking demand.*
- For a shopping centre use, Appendix I of the POD requires that parking be provided at a rate of :
 - 1 space / 20m² GFA or alternative rate where demonstrated in a Parking Assessment Report.
- In the *Statement of Advice Aura Town Centre – Stage 1 Sub-precinct 8.1 Design Standards – Parking and Access* dated 19 December 2024 (Section 2.2) SLR demonstrated that the proposed interim parking rate of 4.23 spaces per 100m² GLA would:
 - meet the practical requirements of the Town Centre development



- support the broader development principles relating to sustainability and accessibility (particularly the intent to provide a “15-minute community”).
- exceed Sunshine Coast Council’s minimum parking requirements for shopping centre developments located within a centre zone where the centre is not located within the jurisdiction of a Priority Development Area.
- be consistent with the supply median provided at other similarly sized shopping centres across New South Wales, Victoria and Queensland.
- Furthermore, the proposed provision of a basement carpark under most of the built form footprint ensures that the ability to ultimately achieve a maximum of 15% variation to the total parking requirements of the ultimate development (as per Table 23 DS4.2) is not prejudiced.
- Notwithstanding this, Stockland is amenable to delivering the Stage 1B car parking spaces concurrently with Stage 1A. The amended architectural plans provided at **Appendix B** show this change and highlight that there is a surplus of parking until the Stage 1B tenancies are delivered and operational.

(b) Car Park Access

The proposed car park entry shown below creates conflict points for vehicles and cyclists on the east-west road. A safer entry already exists via the western roundabout, making this access unnecessary. Submit amended plans removing this entry and consolidate the carpark entry through the roundabout to improve safety and reduce conflict.

SLR Response

To inform EDQ’s assessment, the following clarifications are provided:

- The intent of this secondary access point to the temporary western car park is to provide a “forgiving” circulation network. In the absence of this connection, some drivers approaching from the west are anticipated to perceive that Main Street facilitates connectivity to the at-grade car park. When this occurs, it will be a circuitous route for drivers to return to locate a car park as at a minimum they will need to circumnavigate the entire centre.
- To avoid conflict with pedestrians and cyclists entering the centre, only the very southernmost section of Main Street has been designed to facilitate two-way vehicle movement. This design ensures that vehicles utilising the secondary access point don’t traverse the pedestrian desire line into the centre, aligning with the mall entrance and Main Street awning.
- That is, visitor cyclists accessing the shopping centre from the west are provided with a dedicated shared path entry to the front door with bike racks located conveniently adjacent. These facilities enable visitor cyclists to avoid using, if desired, the southern east-west road when travelling to/from the west.
- Furthermore, employee cyclists accessing the centre from the west will travel along the interim east-west circulation roadway to access the End of Trip (EOT) facility. These cyclists will share the traffic lane with vehicles. The sharing of the traffic lanes in the interim configuration is an appropriate outcome given the low speed/low volume environment and is consistent with the outcome of cyclists sharing traffic lanes on the adjacent Main Street.



- It is noted that the ultimate functionality of the east-west link is to form the Eastern Pedestrian Link and Western Pedestrian Link. Whilst the Pedestrian Links will not ultimately restrict cyclist movement east-west, the Pedestrian Links are not intended to be a primary cyclist route with cyclist movement instead facilitated by the contraflow/dedicated cycle paths surrounding the centre. The interim arrangement is, therefore, not inconsistent with the ultimate planning for the centre.

(c) Circulation and Access

(i) Submit amended plans to demonstrate how the carpark can be more formally structured with circulating roadways (i.e. no direct parking access) and divided into modules/sections of around 50 parking spaces each. The provision of parking spaces immediately after entry may cause delays for vehicles entering and circulating the parking area.

SLR Response

To inform EDQ's assessment the following clarifications are provided:

- The proposed temporary at-grade car park is conventional in its design and is well serviced by entry points. That is, two primary entrance points plus a secondary entrance point will readily distribute the traffic demands associated with the 240 spaces proposed, with limited internal congestion likely to arise.
- The proposed car park design is porous and provides multiple pathways to circulate from individual parking spaces to the circulation roadways servicing the parking area. This allows drivers to avoid any of the modest congestion that might be experienced associated with waiting for other vehicles to manoeuvre into or out of parking spaces.
- It is also noted that parking is not proposed immediately after entering the site as the parking areas are remote from the external road network and, therefore, already include significant lengths of circulation roadways consistent with good practice.
- The alternative to the current design that would meet this request would be to extend the parking aisles to intersect with Main Street. Whilst such an arrangement might marginally reduce car park congestion and is not an uncommon arrangement, particularly for bulky goods developments, it would negatively impact the urban design outcome along Main Street.
- This impact on the urban design would be due to the introduction of significantly more vehicle movements on Main Street and result in a higher cognitive load on drivers. This higher cognitive load on drivers would arise due to drivers not only needing to circulate along Main Street, avoiding other users, but also scanning adjacent parking aisles for vacant spaces.
- On balance, this is considered a poor outcome as this alternative treatment would prioritise minimising the limited vehicle congestion that might occur over the urban design outcome.

(ii) Demonstrate on plans that the junction between the northern entry roadway and the internal circulating aisle (including the first corner) allows a B99 vehicle to pass a B85 vehicle. Also confirm this for the adjacent northeast corner."

SLR Response

To inform EDQ's assessment the following clarifications are provided:



- Swept paths for the requested vehicles are included at **Appendix D**.

Item 9: Basement Plan – Plan A-DA-1000

“Submit amended basement plans to show the following:

(a) Wheel stops where parking bays are adjacent to pedestrian circulation paths.

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The Plan of Development (Table 23 DS4.5) requires that the car parks are designed in accordance with the AS2890 suite.
- In relation to wheel stops, AS2890.1 Section 2.4.5.4 Wheel Stops identifies that:
 - *Wheel stops may be provided where it is considered necessary to limit the travel of a vehicle into a parking space. If used they shall meet the requirements given below.....*
 - *Wheel stops should be avoided in any situation where they may be in the path of pedestrians moving to or from parked vehicles, or crossing a car park for any other purpose.*
- Further to the guidance in AS2890, it is Stockland's operational experience from operating numerous centres over many years that the use of wheel stops should be avoided as wheel stops present a trip hazard for pedestrians, with this risk typically greater than the hazard the use of wheel stops minimises. As a result, Stockland's centre design guideline preferences the use of bollards where deemed necessary.
- Based on both the guidance presented in the relevant Australian Standard and Stockland's operational experience as captured within their internal design guideline, bollards have been selectively introduced into the amended design at **Appendix B**.
- It is noted that during detailed design, the precise location of each individual bollard indicatively indicated on the plans will be optimised. For instance, an intent has been shown on the drawings to install bollards along the pedestrian connection extending to the west from the southern mall entrance. The diagrammatic location of the bollard line unnecessarily constrains the width of the pathway; however, in practice, the location of each bollard will be optimised during the detailed design process as is typical.

(b) Ensure there is sufficient space for a B99 vehicle to manoeuvre around the left turn exit from the south-eastern aisle (next to the carwash) without interference from the central median.

SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The amended plans provided at **Appendix B** address this item by converting the subject parking aisle to one-way.

(c) PWD access (pedestrian) from the shared zone for the PWD spaces north of the 'Carpark Exhaust' are obstructed. Suggest swapping with the bays to the south of the exhaust."



SLR Response

To inform EDQ's assessment, the following clarifications are provided:

- The amended plans provided at **Appendix B** address this item.

Closure

Should you have any further queries in relation to these clarifications, please do not hesitate to contact the undersigned.



Brendyn Rheinberger, RPEQ: 17962
Principal – Transport Advisory



Jeffrey Baczynski, RPEQ: 23611
Technical Director – Transport Advisory

Basis of Statement of Advice

This report has been prepared with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Client. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid. This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR. SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.





Appendix A EDQ Further Issues



Our ref: DEV2024/1586

24 February 2025

Stockland Development Pty Ltd
C/- Urbis Ltd
Att: Ms Sirena Kwok
Level 32, 300 George Street
BRISBANE QLD 4000

Email: skwok@urbis.com.au

Further Issues Letter

PDA Development Application DEV2024/1586 for Development Permit for a Material Change of Use for Business, Food Premises, Health Care Services, Indoor Entertainment, Indoor Sport and Recreation, Market, Shop, Shopping Centre; and Reconfiguring a Lot (1 into 2 Lots) at Lot 11 Aura Boulevard, Bells Creek described as Lot 11 on SP333898

After undertaking an assessment of the PDA development application, the Minister for Economic Development Queensland (MEDQ) has identified the following further issues:

1. Southern Frontage

a) Activation

The proposed southern façade treatment does not comply with the Plan of Development's (PoD) activation requirements. Given the interim stage of the development may last several years, additional treatments are required to maintain compliance and ensure meaningful street interaction. Submit amended plans to show changes to the design to align with the PoD requirements for active frontage.

b) Awnings

The design of the pedestrian connection along the southern frontage lacks weather protection, contrary to the PoD. Submit plans to show the provision of 3-4 metre awnings along the southern frontage to provide weather protection to pedestrians

c) Edge Drop-off

Provide clarification of how the edge/drop off in Stage 1 southeast wall will be managed until future stages are developed.

2. East-West Connection

a) Provide an ultimate stage 2 layout drawing including the east-west pedestrian link and demonstrate the full Stage 2 vehicle and cyclist movement network.

b) Provide a revised east-west pedestrian and cycling link including a dedicated pathway adjoining the east-west road. Provide a revised east-west pedestrian and cycling link including a dedicated pathway adjoining the east-west road.



3. Cycle Infrastructure

a) Bike Lanes

The architectural drawings must be updated to clearly show the 1.5m northbound bike lane and the shared southbound car lane, as outlined in the traffic report. Layout and cross-section drawings are to be amended accordingly. Additionally, line-marking, signage, pavement painting, and street works must be detailed to demonstrate how the shared environment will be established for both the interim and ultimate shared zone.

b) Bike Parking

Provide locations of all visitor bike parking racks on all plans and provide a summary of the number of spaces provided.

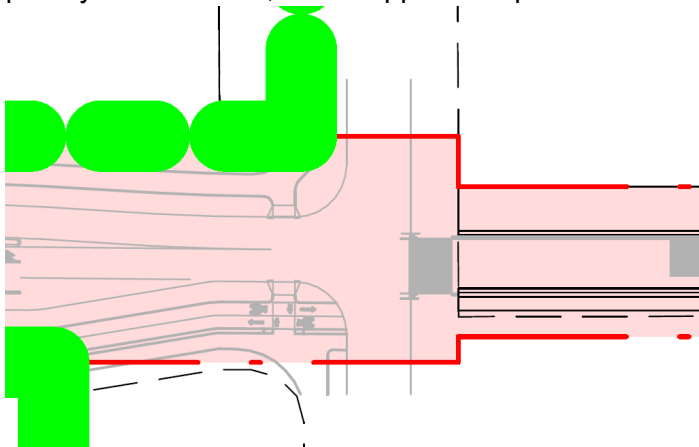
4. Private Roads

Further detail is required to clarify extent of private roads and tenure:

- a) The proposed extent and tenure of all private roads (e.g. Main Street and connections to Council Road network);
- b) Public right of access through any closure arrangements; and
- c) Confirm that the management of infrastructure within the private roads is responsibility of the landowner.

5. Internal Roads

Submit updated drawings to demonstrate how the full extent of internal road works and the interim intersection arrangement at the below location can be consistent with a safer ultimate intersection (consider a roundabout or staggered priority intersections as per previous approval). The full extent of internal roads required as part of this stage of development have not been shown on drawings. In particular, the western road link to intersection 8 has been augmented, where previously it included 1-way roads and 3-way priority intersections, it now appears to promote an ultimate 4-way priority intersection:



6. Taxi/Rideshare provision

Submit plans to show a taxi set-down/rideshare space near the shopping centre entrance.

7. Main Street

Submit plans to demonstrate the following:

- Widen the bend in the northern section of Main Street to comply with AS2890.1 Off-street parking standards, ensuring unobstructed two-way operation.
- Amend Architectural plans updated with Main Street parallel parking bay dimensions in accordance with AS2890.1 requirements.

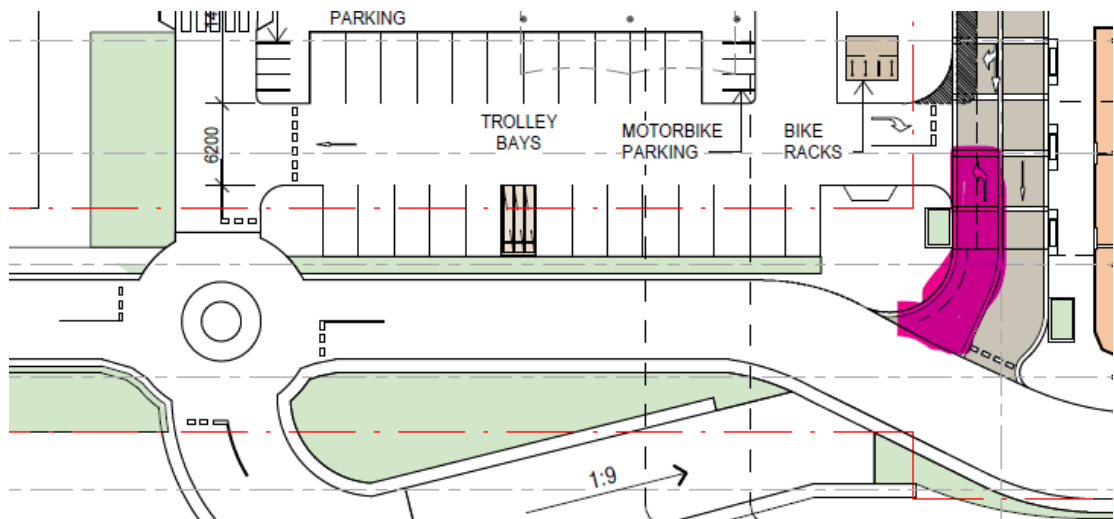
8. Car Parking – Above Ground

a) Car Parking Numbers

Submit amended plans demonstrating that the car parking numbers provided are in accordance with the PoD requirements. This will require Stage 1B car parking to be delivered with Stage 1A.

b) Car Park Access

The proposed car park entry shown below creates conflict points for vehicles and cyclists on the east-west road. A safer entry already exists via the western roundabout, making this access unnecessary. Submit amended plans removing this entry and consolidate the carpark entry through the roundabout to improve safety and reduce conflict.



c) Circulation and Access

- Submit amended plans to demonstrate how the carpark can be more formally structured with circulating roadways (i.e. no direct parking access) and divided into modules/sections of around 50 parking spaces each. The provision of parking spaces immediately after entry may cause delays for vehicles entering and circulating the parking area.
- Demonstrate on plans that the junction between the northern entry roadway and the internal circulating aisle (including the first corner) allows a B99 vehicle to pass a B85 vehicle. Also confirm this for the adjacent northeast corner.

9. Basement Plan - Plan A-DA-1000

Submit amended basement plans to show the following:

- Wheel stops where parking bays are adjacent to pedestrian circulation paths.
- Ensure there is sufficient space for a B99 vehicle to maneuver around the left turn

exit from the south-eastern aisle (next to the carwash) without interference from the central median.

- c) PWD access (pedestrian) from the shared zone for the PWD spaces north of the 'Carpark Exhaust' are obstructed. Suggest swapping with the bays to the south of the exhaust.

10. Landscaping

- a) Provide additional landscaping within the site to bring the landscaping up to the 10% expected by the Plan of Development.
- b) Consistent terminology should be used throughout the report, i.e. Kabi Kabi or Gubbi Gubbi.
- c) Provide details on the growing media and strategy to optimise the health and growth of street trees that are not deep planted, such as those located above the basement.

11. EV Chargers

Provide an updated assessment demonstrating how the proposed development complies with the NCC 2022 requirements for EV charging and electrical capacity for Class 6 buildings, which are defined as *shops or other buildings used for the sale of goods by retail or the supply of services directly to the public* and amend the development proposal as necessary to meet these obligations.

12. Easements

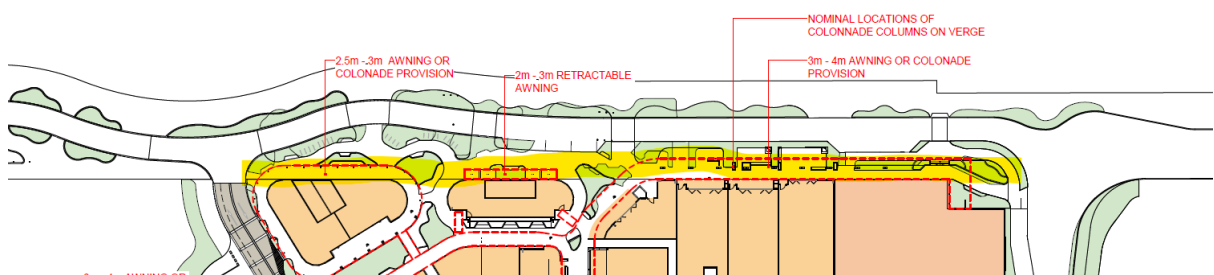
Provide confirmation from UnityWater that the proposed easement arrangement for public water infrastructure on private roads is acceptable.

13. Plans

Several architectural plans have incorrect scaling. Please amend the plans to ensure the correct scale is provided.

14. Staging Plan

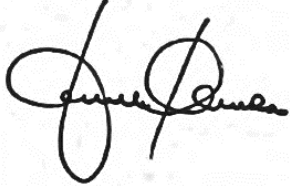
The staging boundaries may need adjustment to ensure the functionality of the tenancies, especially the active frontages to the north. For example, the details and access highlighted in yellow are not included in the current application. Please review the staging extent and provide updated plans.



The requested information is required within three (3) months from the date of this notice.

Should you have any queries in relation to this matter, please do not hesitate to contact Jennifer Davison on (07) 3452 7127 or at Jennifer.davison@edq.qld.gov.au

Yours sincerely

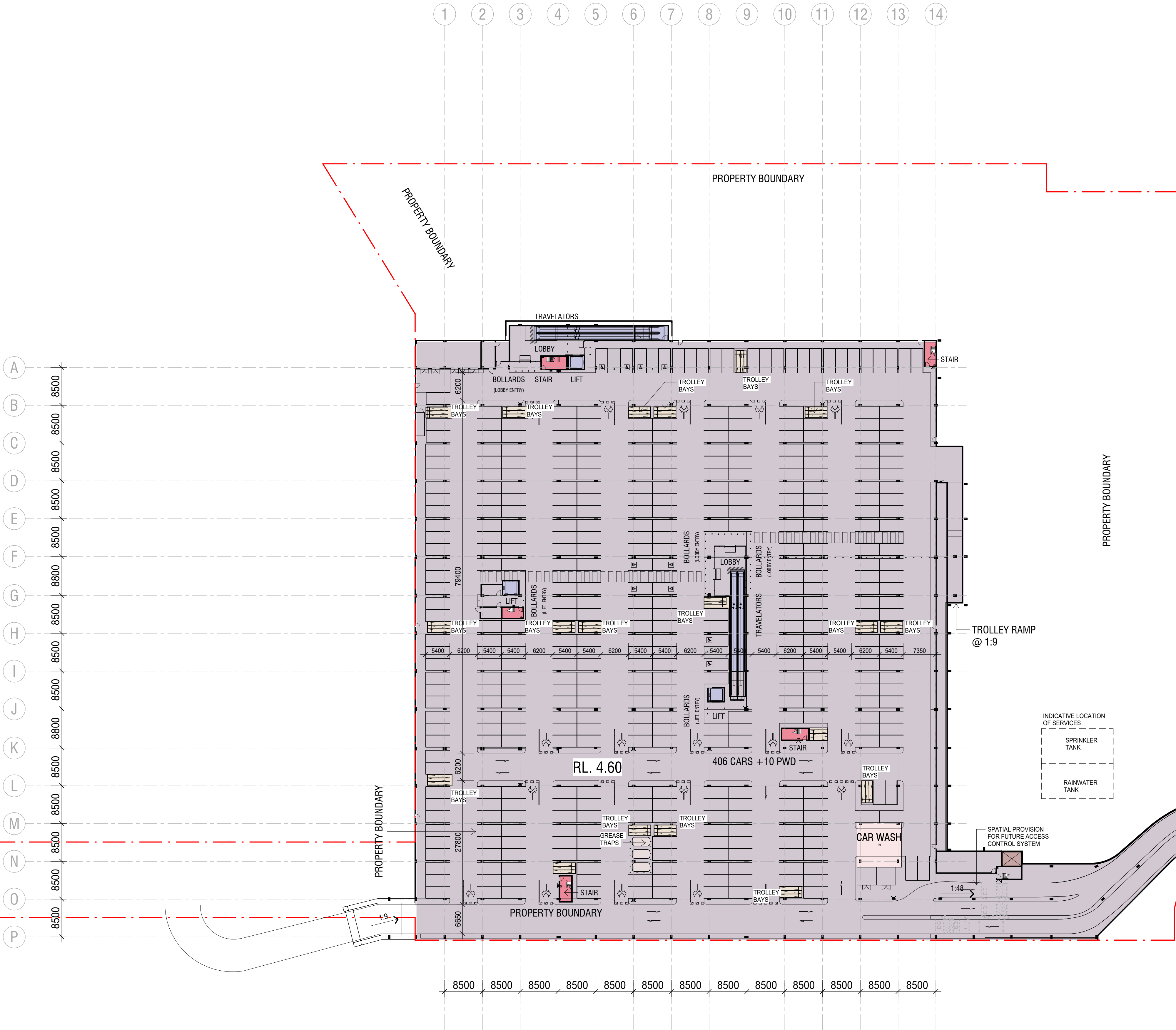
A handwritten signature in black ink, appearing to read 'Jennifer Davison', with a large, stylized initial 'J'.

Jennifer Davison
Principal Planner
Development Assessment
Economic Development Queensland



Appendix B Amended Plans

LEGEND				
	FOOD PREMISES			
	SHOPPING CENTRE			
	END OF TRIP/ SECURE BICYCLE PARKING			
	BIKE RACKS			
	COMMERCIAL			
	HEALTH			



Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	28-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	13-12-24	WIP	MM	GC
F	18-12-24	DA ISSUE	MM	GC
G	17-04-25	DA RFI UPDATE	MM	GC

Do not scale this drawing. Verify all dimensions on site before commencing any work. Copyright © 2025 Buchan. This drawing remains the property of The Buchan Group Australia Pty Ltd. Reproduction in whole or in part without prior consent is forbidden.

File
\\ACCDocs\\Buchan\\240206-R24-Aura_Town_Centre\\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 17/04/2025 12:15:45 PM
Date Issued 17-04-25
Scale 1 : 500 @A1

0 5 10 20 30M

Drawing Title
BASEMENT PLAN

Drawing Number
A-DA-1000

Revision
G

BUCHAN

Brisbane Studio
+ 61 7 3859 9222 / buchangroup.com.au

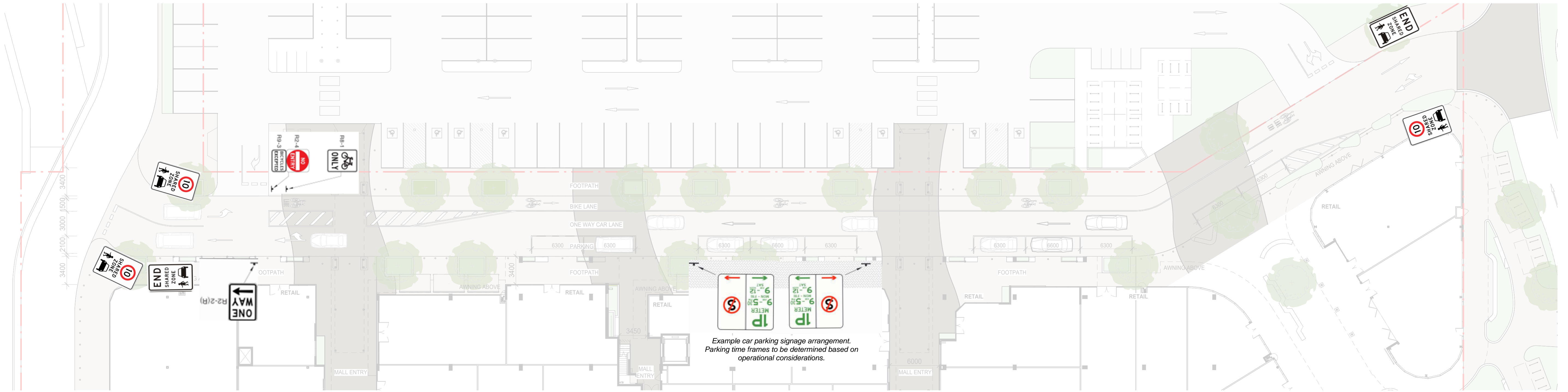
DA ISSUE



Brisbane Studio
+ 61 7 3859 9222 / buchangroup.com.au



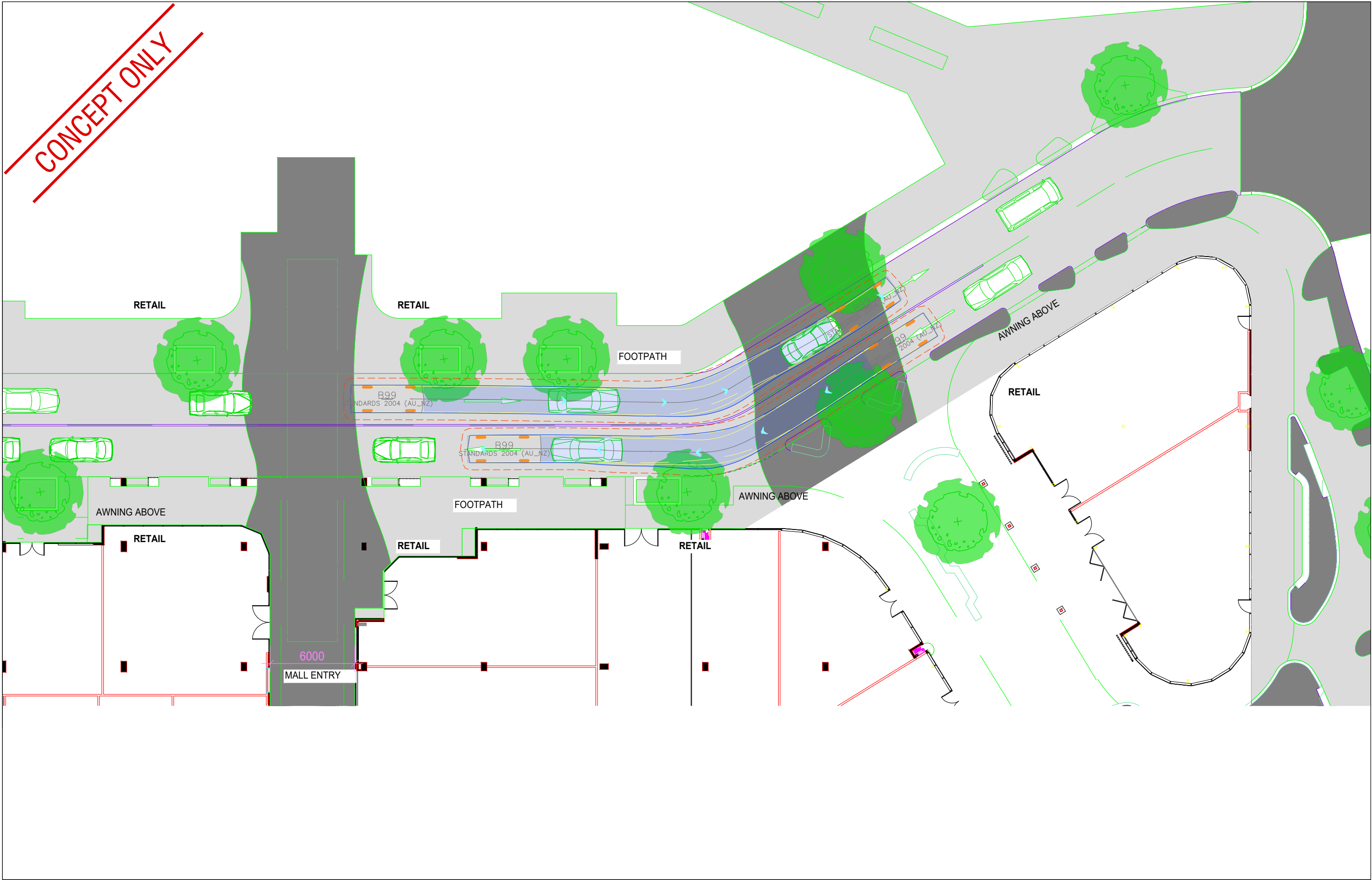
Appendix C Main Street Treatment



Base layout as per Buchan Main Street Typology Plan Current Stage (A-DA-1200H)



Appendix D Swept Paths



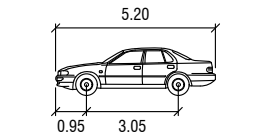


LEVEL 16, 175 EAGLE ST
BRISBANE
QUEENSLAND 4000
AUSTRALIA
T: 61 7 3858 4800
www.slrconsulting.com

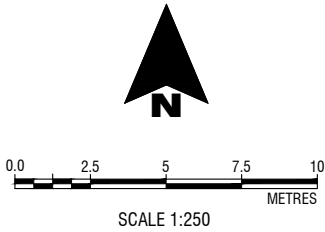
The content contained within this document may be based on third party data.
SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Project No:	620.041622
Date:	17-04-2025
Drawn by:	BR
Certified by:	-
Sheet Size:	A3
Projection:	-

- SWEPT PATH LEGEND
- Vehicle Path
 - Vehicle Body
 - Body Clearance
 - Front Wheels



B99	
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



Stockland

Aura Town Centre

Main Street Swept Paths
B99 Design Vehicle

FIGURE SK01