



ACT
Government

Transport Canberra and
City Services

FREEDOM OF INFORMATION COVERSHEET

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

FOI reference: 21-089

Information to be published	Status
1. Access application	Published
2. Decision notice and schedule	Published
3. Documents	Published
4. Additional information identified	n/a
5. Fees	waived
6. Processing time (in working days)	20 days
7. Decision made by Ombudsman	n/a
8. Additional information identified by Ombudsman	n/a
9. Decision made by ACAT	n/a
10. Additional information identified by ACAT	n/a



STANDING COMMITTEE ON PLANNING, TRANSPORT, AND CITY SERVICES
JO CLAY MLA (CHAIR), SUZANNE ORR MLA (DEPUTY CHAIR), MARK PARTON MLA

Inquiry into referred 2019–20 Annual and Financial Reports and Budget Estimates 2020-21
ANSWER TO QUESTION ON NOTICE

Asked by Ms Kikkert:

Ref: Budget paper H, Table 18: 2020-21 TCCS Directorate Infrastructure Program, subheading “Capital Works Program” line item “Road safety improvements (ACT Contribution)”, line item “Road safety improvements (Commonwealth Contribution)”, p43-44

In relation to: On-street parking spaces in Lawson

1. In November 2020, I received from a resident a copy of an email sent by Roads ACT that stated that they would be “arranging an investigation and design study for additional indented parking spaces in Lawson”. This was after being informed by the Minister in September 2020 in a response to a representation that TCCS had determined that “due to existing road widths and layout ... it is not possible to identify any additional on-street parking spaces”. Can the discrepancy in these communications be explained? Which one is the most accurate?
2. If the study referenced in an email from TCCS is happening, has this study commenced?
 - a. If the study has commenced, when will the study conclude?
 - b. If the study has not commenced, when will it commence and when will it conclude?
 - c. If the study has concluded, what were the findings of the study and can the Minister provide the report on the study?
3. Regarding the above line item, is there any funding in this year’s budget for the construction of on-street parking spaces in Lawson?
 - a. If so, how much is being funded and how many on-street parking spaces will be created?

Chris Steel MLA: The answer to the Member’s question is as follows:–

1. The discrepancy appears to be due to a misunderstanding. The width of the road would not permit angled parking to be provided within the existing carriageway. Widening the carriageway to provide additional parking spaces is an option that is being investigated further. However, this option will require capital funding to design and construct.
2. a.) b.) Transport Canberra and City Services has undertaken initial investigations to determine if indented parking may be feasible. Several locations have been identified. However, further work to provide a preliminary design and cost is yet to be undertaken.



LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

QON No. 99

STANDING COMMITTEE ON PLANNING, TRANSPORT, AND CITY SERVICES
JO CLAY MLA (CHAIR), SUZANNE ORR MLA (DEPUTY CHAIR), MARK PARTON MLA

- c.) TCCS intends to commission a study to provide a preliminary design for indented parking and costing. This is planned to be undertaken in April 2021 with options expected to be available June 2021 and is funded via the Minor New Work program.
3. Once a design and costing has been completed consideration will be given to how these parking spaces can be funded.

Approved for circulation to the Standing Committee on Planning, Transport, and City Services

Signature:

Date:

22 / 3 / 21

By the Minister for Transport and City Services, Chris Steel MLA

[REDACTED]

Dear [REDACTED]

Freedom of Information Request - Reference 21-089

I refer to your application for access to government information received by Transport Canberra and City Services (TCCS) on 27 August 2021 under the *Freedom of Information Act 2016* (FOI Act). It is my understanding that you are seeking access to the following government information:

1. the design report and associated costing for new parking in the Canberra suburb of Lawson that was mentioned by Minister Chris Steel in his response to Question on Notice no. 99 from the inquiry into referred 2019—20 annual and financial reports and budget estimates 2020-21; and
2. if it is different in any way to the above, the study of parking supply and demand in Lawson that was mentioned by Minister Chris Steel in his response to Question on Notice no. 393 from questions on notice paper no. 07 (6 August 2021).

Timeframes

A decision is due on your application by 27 September 2021.

Authority

I am an Information Officer appointed by the Director-General under section 18 of the Act to deal with access applications made under Part 5 of the FOI Act.

Decision on access

A search of TCCS records to identify information relevant to your application have been completed. The search identified four records (40 pages) within the scope of your access application, being a report and three attachments.

I wish to take this opportunity to draw attention to the current status of this report. As marked within the report, it is an initial draft. At this time, the report is under internal review, has not been endorsed by TCCS, and may be edited further before reaching final publication.

In reviewing the information within these documents, I have decided to provide:

- full access to one record; and
- partial access to three records.

I have refused access under section 35(1)(c) of the FOI Act to some of the information that you have requested as it is contrary to the public interest to release. My access decision is detailed further in the following statement of reasons below. The records are enclosed at Attachment B with deletions applied to information that is contrary to the public interest.

Statement of Reasons

In making my decision on disclosing government information, I must identify all relevant factors in schedule 2 of the FOI Act and determine, on balance, where the public interest lies. In reaching my access decision, I have considered the FOI Act in general which favours disclosure of information unless it is found to be contrary to the public interest. I have also identified the following factors as relevant to the information identified as in scope of your request:

Factors favouring disclosure (Schedule 2.1)

- Section 2.1 (a)(i) - promote open discussion of public affairs and enhance the government's accountability;
- Section 2.1 (a)(iv) - ensure effective oversight of expenditure of public funds; and
- Section 2.1 (a)(viii) reveal the reason for a government decision and any background or contextual information that informed the decision.

Factors favouring non-disclosure (Schedule 2.2)

- Section 2.2 (a)(ii) – prejudice the protection of an individual's right to privacy or any other right under the *Human Rights Act 2004*.

I find that it is in the public interest to release most of this information. However, I have found some information within the relevant documents to be contrary to the public interest to disclose.

Information relating to privacy

In reviewing the information in scope of your application, the personal information of third parties was identified, including names and employment position of these parties. Deletions have been applied to information where it would prejudice the protection of an individual's right to privacy or any other right under the *Human Rights Act 2004*.

Factors in favour of release can still be met while protecting the personal information of these individuals. The protection of this information outweighs disclosure in this instance.

Charges

Pursuant to *Freedom of Information (Fees) Determination 2018* processing charges are not applicable to this application as the total number of pages to be disclosed are within the fee-free threshold (50 pages).

Online publishing – disclosure log

Under section 28 of the Act, TCCS maintains an online record of access applications called a disclosure log. Your original access application, my decision and documents will be published in the TCCS disclosure log within 3-10 days from the date of this decision.

Your personal contact details will not be published. You may view the TCCS' disclosure log at http://www.tccs.act.gov.au/about-us/freedom_of_information.

Ombudsman review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek an Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is published in TCCS' disclosure log or a longer period allowed by the Ombudsman.

If you wish to request a review of my decision, you may write to the Ombudsman at:

The ACT Ombudsman
GPO Box 442
CANBERRA ACT 2601
Via email: actfoi@ombudsman.gov.au

ACT Civil and Administrative Tribunal (ACAT) review

Under section 84 of the Act, if a decision is made under section 82 on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision.

Further information may be obtained from ACAT at:

ACT Civil and Administrative Tribunal
Level 4, 1 Moore Street
GPO Box 370
CANBERRA CITY ACT 2601
Telephone: (02) 6207 1740
www.acat.act.gov.au

If you have any queries concerning the directorate's processing of your request, or would like further information, please contact the TCCS FOI team on (02) 6207 2987 or email to tccs.foi@act.gov.au.

Yours sincerely



Kristine Scheul
Information Officer

27 September 2021

FREEDOM OF INFORMATION REQUEST SCHEDULE

Please be aware that under the *Freedom of Information Act 2016*, some of the information provided to you will be released to the public through the ACT Government's Open Access Scheme. The Open Access release status column of the table below indicates what documents are intended for release online through open access.

Personal information or business affairs information will not be made available under this policy. If you think the content of your request would contain such information, please inform the contact officer immediately.

Information about what is published on open access is available online at: https://www.cityservices.act.gov.au/about-us/freedom_of_information/disclosure-log

Factors favouring non-disclosure:

Schedule 2.2(a)(ii) - prejudice the protection of an individual's right to privacy or any other right under the *Human Rights Act 2016*.

Description	File No
Parking study in Lawson	21-089

Reference number	Page number	Description	Date	Status	Reason for non-release or deferral	Open Access release status
1	1 - 26	50521067 Lawson Parking (DRAFT_V1)	27 May 2021	Partial Disclosure	Schedule 2.2(a)(ii)	Documents will be published on the TCCS Disclosure Log .
2	27 - 31	Attachment - Amended Parking Survey	27 May 2021	Full Disclosure	Not Applicable	
3	32 - 35	Attachment - 50521061-C-5001	27 May 2021	Partial Disclosure	Schedule 2.2(a)(ii)	
4	36 - 40	Attachment - Sketch Drawings	27 May 2021	Partial Disclosure	Schedule 2.2(a)(ii)	



Lawson

Residential Parking Review

50521069



Prepared for
Transport Canberra and City Services

13 August 2021

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Document Information

Prepared for Transport Canberra and City Services

Project Name Residential Parking Review

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Job Reference 50521069

Date 13 August 2021

Version Number 1

Author(s):

Name: [REDACTED]
Job title: [REDACTED]

Effective Date 27/05/2021

Approved By:

Name: [REDACTED]
Job title: [REDACTED]

Date Approved 27/05/2021

Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
00	27/05/2021	Draft Client Review	[REDACTED]	
01	13/08/2021	Final Draft Client Review	[REDACTED]	[REDACTED]

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Our report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Cardno is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this report is accurate at the date of issue, changes may occur to the site conditions, the site context or the applicable planning framework. This report should not be used after any such changes without consulting the provider of the report or a suitably qualified person.

Executive Summary

Cardno was engaged by Roads ACT Traffic Management and Safety (TMS) to undertake a parking study and provide recommendations for additional parking within the vicinity of Section 21 and Section 45, Lawson. This was in response to several requests TMS received from the community for additional parking around these blocks.

A parking survey was completed on Wednesday 28 April 2021, between 6:00am to 9:00am and between 4:00pm to 7:00pm to assess the current utilisation of available parking in the vicinity of the Sections. The survey looked at both indented car parking spaces and unrestricted on-street car parking locations.

The survey area for Section 21 identified an average parking occupancy rate of 27% of potential car parking spaces. This result could be attributed to the extensive availability of on street parking within Nevertire Street, however due to the distance from Section 21 and possible limited path options, residents may perceive that the distance is too far to be used for parking and not as easily accessible as parking options closer to their place of residence.

The survey area for Section 45 identified an average parking occupancy rate of 20% of potential car parking spaces. This result could be attributed to the extensive availability of on street parking within Jumbuck Crescent, particularly west and east of Section 45, however again due to perceived walking distances and the limited availability of paths along the open space verge, residents may find these parking options less desirable than the indented car parking spaces provided that are closer to their place of residence.

Within the vicinity of Section 21 there is the possibility of 36 additional parking places that could be constructed on the Fire Access Trail, north of the Section. To permit public parking and access to this area, the access trail would need to be gazetted and recognised as a road area. Additional measures, such as bollards would need to be installed to restrict vehicles entering the open space area.

Within the vicinity of Section 45, there is the possibility of 49 additional parking places across Dawn Crescent and Jumbuck Crescent. Within these streets there is minimal modification to existing assets that will be needed to allow the additional parking.

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1 Background

Cardno was engaged by Roads ACT Traffic Management and Safety (TMS) to undertake a parking study and provide recommendations for additional car parking opportunities within the vicinity of Section 21 and Section 45, Lawson.

1.1 Section 21 Blocks 1, 2 and 3

Section 21 is zoned RZ4 Medium Density Residential, the three blocks range in area from 5693m² up to 8954m². Access to the three blocks are from Wanderlight Avenue by five two-way driveways.

TMS have received several requests from the community for additional visitor parking in the vicinity, as there is limited on-street parking along Wanderlight Avenue, as shown in Figure 1-1 below.

Figure 1-1 Section 21 – Wanderlight Avenue

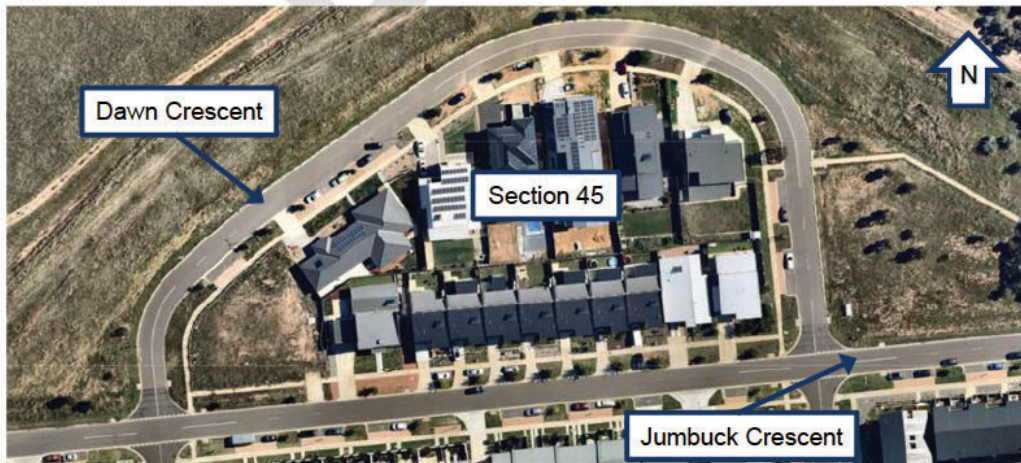


1.2 Section 45 Blocks 1-17

Section 45 is zoned RZ1 Suburban Residential and the single residential blocks range from compact, 249m² up to large, 595m². Access to the residential blocks are by individual driveways from Dawn Crescent and Jumbuck Crescent.

TMS have received several requests from the community for additional visitor parking in the vicinity, as there is limited on-street parking provided within the two surrounding roads, as shown in Figure 1-2 below.

Figure 1-2 Section 45 – Dawn Crescent



2 Parking Survey

In order to assess the utilisation of the available parking in the vicinity of the two sites, a parking survey was completed as part of the project.

Responding to possible influences of parking availability, a standard work weekday was identified as the survey day. In addition, the survey was to occur outside of school holidays and not coincide within a public holiday long weekend period.

Wednesday was the nominated weekday, with the parking survey to cover the hours of 6.00 am to 9.00am and the afternoon period of 4.00pm to 7.00pm.

The completed parking survey was completed on Wednesday 28 April 2021.

2.1 Types of Parking Surveyed

Within the surrounding road network of the two survey locations, indented car parking spaces and unrestricted on-street kerb side parking places were included in the survey data.

Within the survey area there are no traffic signs that restrict parking opportunities, therefore the application of road rules would apply to permitted car parking opportunities. Examples include no parking within 10m from the nearest point of an intersecting road at an intersection with traffic lights (Division 12.3 Road Transport (Road Rules) Regulation 2017: Effective 12/08/21) and not stop on a road in a position that obstructs access to and from footpath, driveway etc (Division 12.6).

In addition, parking is also permitted at tee intersections along the continuous side of the continuing road at the intersection (Division 12.3).

Researching the Road Transport Regulation 2017, the text appears to be silent to permit parallel kerb side parking at locations between parking bays where no parking control signs are in place. However, the Road Transport Regulation is explicit that double parking is not permitted, therefore an implied acceptance, if all other rules are met, that parallel kerb side parking between indented car parking locations is also permitted. It is on the basis that parallel car parking opportunities between the constructed indented car parking bays has been included in the parking survey.

Figure 2-1 Permitted parking locations at tee intersections without traffic lights (Road Transport (Road Rules) Regulation 2017)

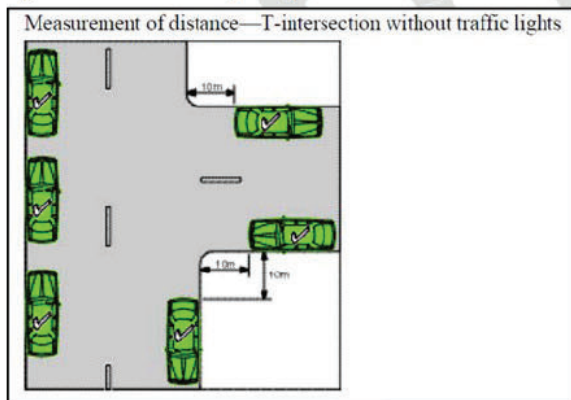


Figure 2-2 Double parking restriction (Road Transport (Road Rules) Regulation 2017)

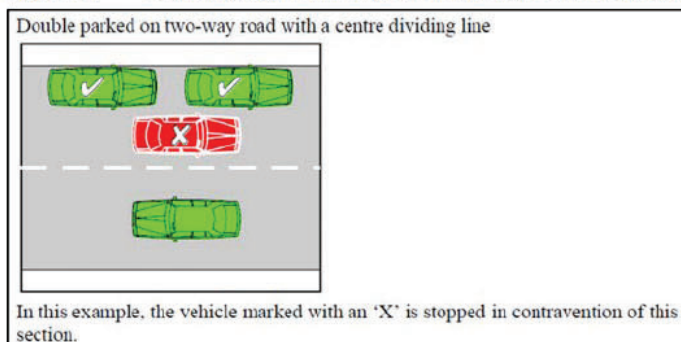
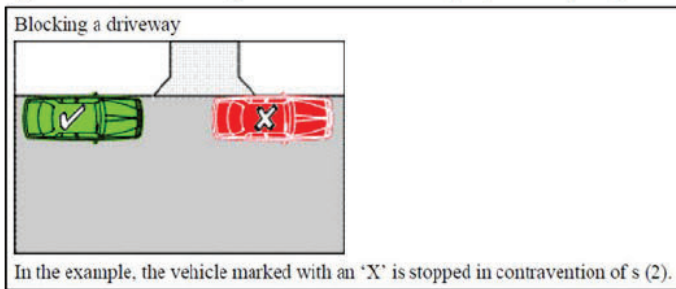


Figure 2-3 Obstructing access to and from footpath, driveway etc (Road Transport (Road Rules) Regulation 2017



2.2 Section 21 Parking Survey Extent

The location of Section 21 in relation to opportunities for parking and also in possible competition from adjacent residential areas, the extent of parking survey was identified to cover the below area.

Figure 2-4 Section 21 – Parking survey area



2.3 Section 45 Parking Survey Extent

The location of Section 21 in relation to opportunities for parking and also in possible competition from adjacent residential areas, the extent of parking survey was identified to cover the below area.

Figure 2-5 Section 45 – Parking survey area



2.4 Adjacent Higher Density Residential Areas

The available and accessible on street parking is influenced by the type of residential development within the study area.

Both Section 21 and 45 are surrounded by higher density development which could trigger an increase of visitor parking demand due to the higher residential population.

The extended parking survey areas were intentional to ensure a clear understanding and appreciation of available parking opportunities, for both residents and visitors.

2.5 Utilisation Results

As outlined above, legal on street car parking and indented car parking locations were included in the survey results.

The following tables summarise the utilisation of the available parking surrounding Sections 21 and 45.

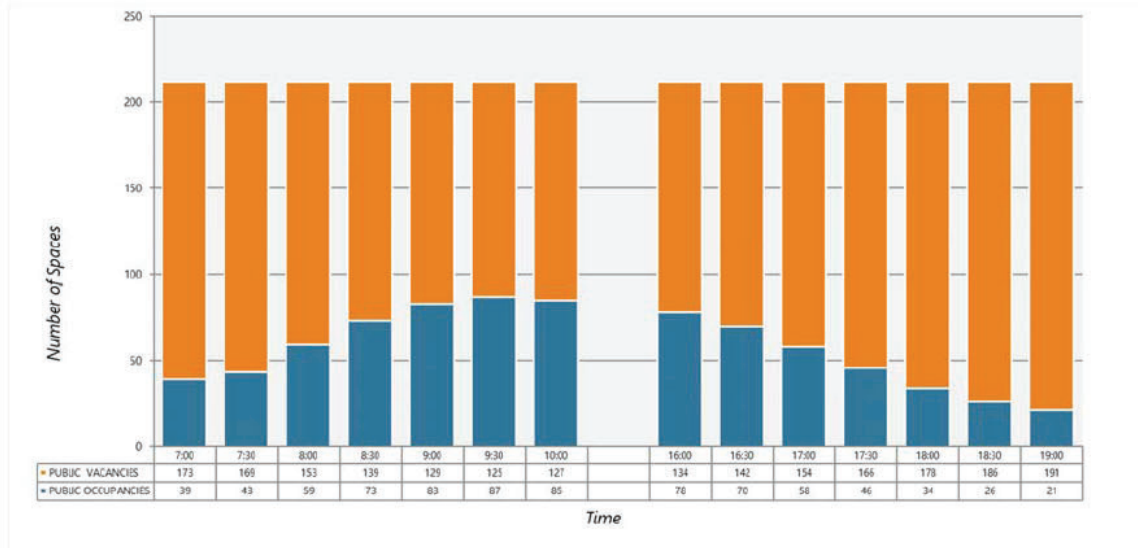
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2.6 Parking Study Analysis

2.6.1 Existing Capacity Section 21

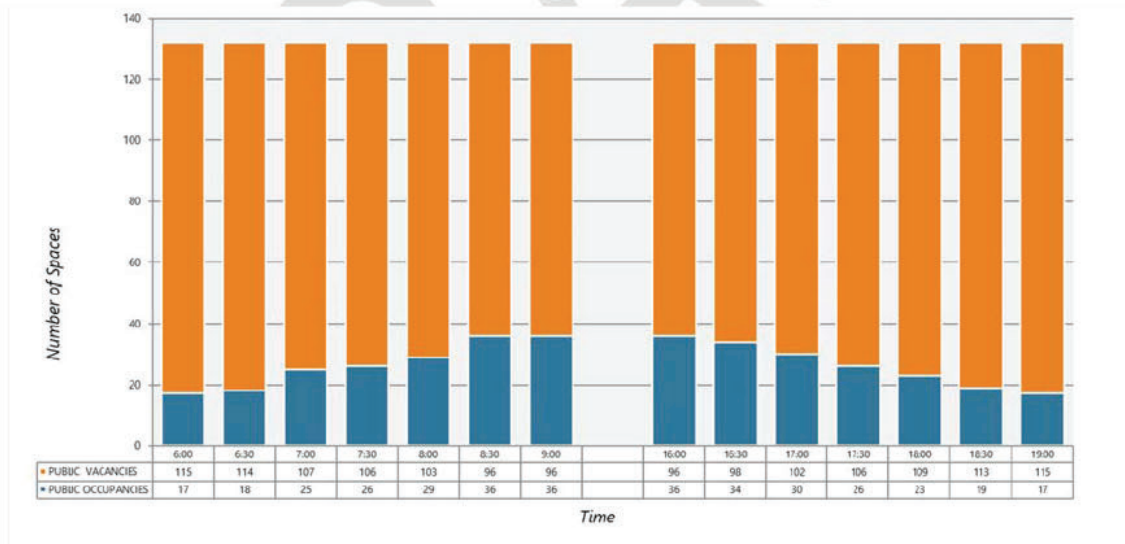
The below figure includes unrestricted on-street parking when indented car parking bays are provided.

Figure 2-6 Public Vacancies and Public Occupancies at Lawson Section 21 Wednesday 28 April 2021



2.6.2 Existing Capacity Section 45

The below figure includes unrestricted on-street parking when indented car parking bays are provided.



2.7 Parking Study Conclusion

As indicated by the above results, the available parking opportunities appear higher than the parking demand for the normal weekday surveyed when taking into consideration the permitted kerb side stopping and parking provisions outlined in the Road Transport (Road Rules) Regulation 2017.

The availability of the additional parking opportunities, especially within the study area of Section 21, may indicate that public users are not familiar or aware that parking is permitted at these locations, even when indented car parking spaces are provided.

3 Additional Car Parking Opportunities

As part of the review and notwithstanding the parking utilisation results the project also requested the investigation of possible locations where additional car parking opportunities could be constructed.

3.1 Section 21

The current road cross section of Wanderlight Avenue consists of a two-way 7.5m wide carriageway. Indented car parking spaces have been constructed on the 8.25m wide verge facing the residential blocks, with unrestricted on street parking along the southern 2.0m wide verge. The southern verge is adjacent to open space and to restrict vehicles from parking on the existing verge, a small (300mm high approximate) retaining wall has been built, located 0.5m from the block boundary. A 1.5m wide path is provided along the residential blocks verge, no footpath is located on the southern verge. Located behind Section 21 is a fire access road with restricted gated access.

Figure 3-1 Aerial view of Wanderlight Avenue and the fire access road



3.1.2 Wanderlight Avenue

3.1.2.1 Southern Verge

The existing southern verge is currently being used for on street parking resulting in an effective carriageway width of 5.5m.

The horizontal and vertical road geometry for the section of Wanderlight Avenue currently being used for on street parking would be suitable for providing indented car parking.

However, to provide the required verge width for the construction of indented parking bays, additional works would be required. These include the demolition of the existing rock retaining wall and earthworks to reshape the existing earth mound; the resulting works would provide a clear 7.5m wide carriageway.

These works however would impact on the existing 150DN water main located behind the existing kerb, resulting in existing fire hydrants and valves being located in the future car parking area should a continuous indented car parking space be constructed.

Icon Water approval would be required to have existing watermain being located in a trafficable area and existing water fittings such as hydrants and valves would need to be located within kerb blisters. Icon Water standards do not permit these type of fittings to be located within road ways as they need to be regularly accessed for maintenance and operational purposes. It is recommended consultation with Icon Water be undertaken to determine the viability of this option prior to further detailed work.

Figure 3-2 Existing On street Parking Wanderlight Avenue



3.1.2.2 Northern Verge

The existing northern verge already has indented car parking bays constructed; although technically permitted, parking at the kerb between the indented parking bays could also occur, as there is no dividing line, 3m of road is available alongside the vehicle that is clear for other vehicles to pass and there are no parking control signs.

Should users park in this manner, with the southern verge being used for on street parking, the effective carriageway is reduced to approximately 3.2m for two-way movement, resulting in through vehicles having to slow and manoeuvre around parked cars at these locations. While this arrangement is still considered acceptable within the current road rules, the operation of the road network would be compromised at this location.

Notwithstanding this, at locations outside of the indented car parking measures, kerb side parking would be considered acceptable where there are no dividing lines.

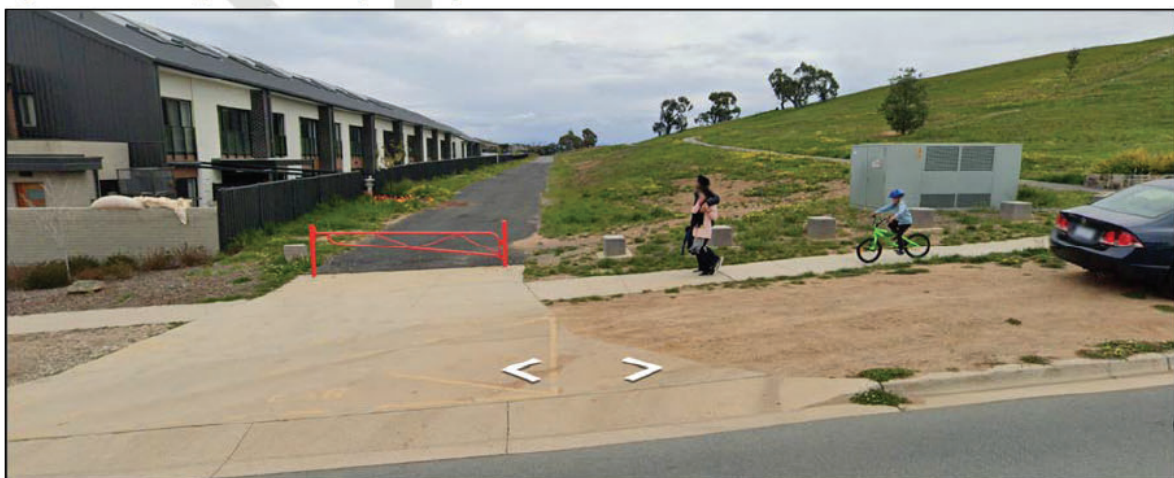
3.1.3 Fire Access Road

The current road cross section of the fire access road is a single 5m wide pavement with no formal kerb, shoulder, street lighting, footpaths or stormwater measures. Access to the road is currently restricted by a locked ranger gate, preventing public access.

The fire access road is within the adjacent block, Block 4, Section 13 which is zoned as Urban Open Space and the road is not a gazetted road.

The possibility to construct parking bays on the northern side of the access road is feasible given the limited existing infrastructure. However, the road would need to be gazetted to allow public access and additional bollards to restrict vehicles entering the wider open space area.

Figure 3-3 Existing On street Parking Wanderlight Avenue



3.1.3.2 Car Parking Options

Indented parallel car parking is proposed along the northern verge of the Fire Access Trail.

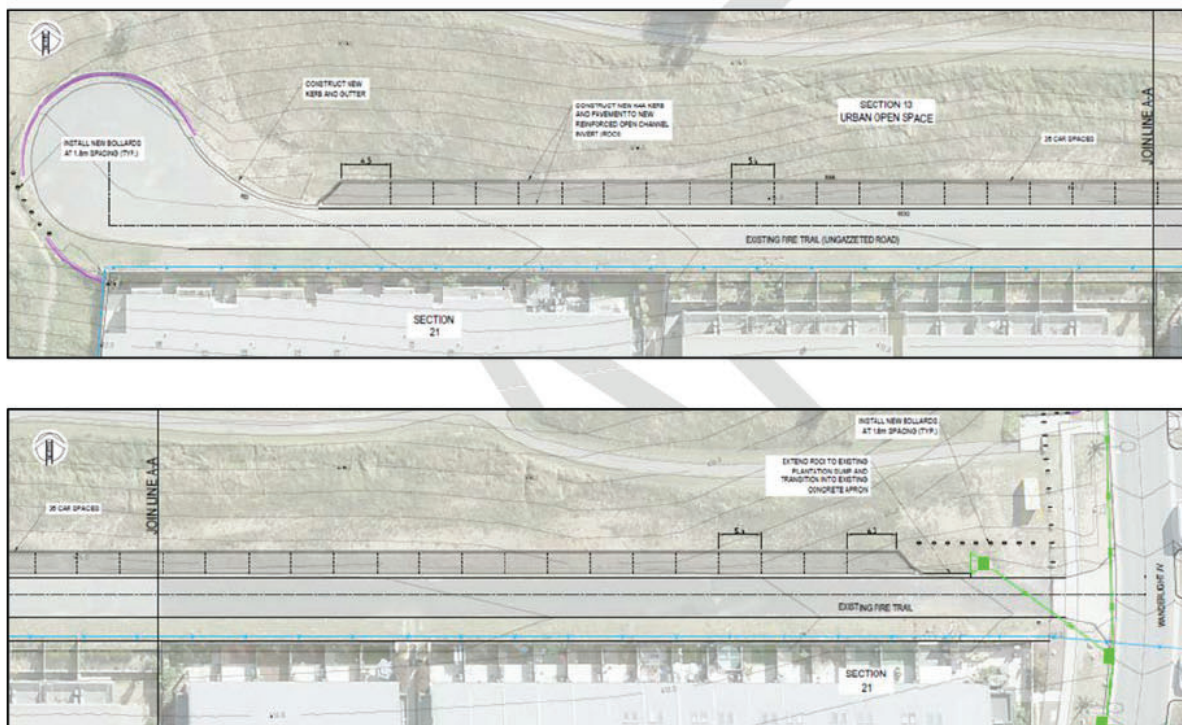
The preferred construction approach consists of constructing a new kerb and gutter at the cul-de-sac head with K4A kerb at the back of the parking bays. The new pavement for parking spaces would fall towards a new reinforced open channel invert (ROCI) constructed at the edge of the existing pavement.

Regrading of the existing earthworks at the back of the car parking would be required to retain the existing swale drainage and direct flows to the existing plantation sump.

Stormwater runoff from the new pavement will be captured in the ROCI and directed into the existing planting sump.

An additional 36 parallel car parking spaces can be constructed, with end bays being 6.3m long and standard internal 5.4m bays elsewhere. To assist with end bay manoeuvrability, 45 degree kerb alignments have been provided.

Figure 3-4 Extract Sketch Drawing – Existing Fire Trail – Proposed Car Park Layout



3.2 Section 45

Dawn Crescent and Jumbuck Crescent provide property access to Section 45.

3.2.1 Dawn Crescent – Existing Conditions

The current road cross section of Dawn Crescent consists of a two-way 7.5m wide carriageway.

Indented car parking spaces have been constructed on the 8.25m wide verge facing the residential blocks, with unrestricted on street parking along the northern 2.0m wide verge adjacent to open space.

A 1.5m wide path is provided along the residential blocks verge, no footpath is located on the northern verge.

Figure 3-5 Aerial view of Dawn Crescent



The majority of the existing services are located on the southern verge close to the residential blocks, with the exception of near the road intersections, where kerb inlet sumps are located to collect stormwater.

The eastern section of Dawn Crescent adjacent to the open space has an existing electrical substation, overland flow path with an open swale behind the castellated kerb. The open space path links into the road edge by an elevated concrete slab. There is no opportunity at this location to construct additional car parking measures.

Figure 3-6 Indented car parking and existing verge Dawn Crescent



The edge road of Dawn Crescent is adjacent to open space with no existing underground services. A portion of the road carriageway falls towards the open space and stormwater runoff is dispersed into the open space area by the castellated kerb.

Considering the existing site conditions, the opportunity to construct additional car parking measures along this section of the road should have minimal impact to existing services and be relatively easily to construct.

Figure 3-7 Dawn Crescent existing road details



3.2.1.2 Car Parking Options

Indented parallel car parking is proposed along the rear of Dawn Crescent.

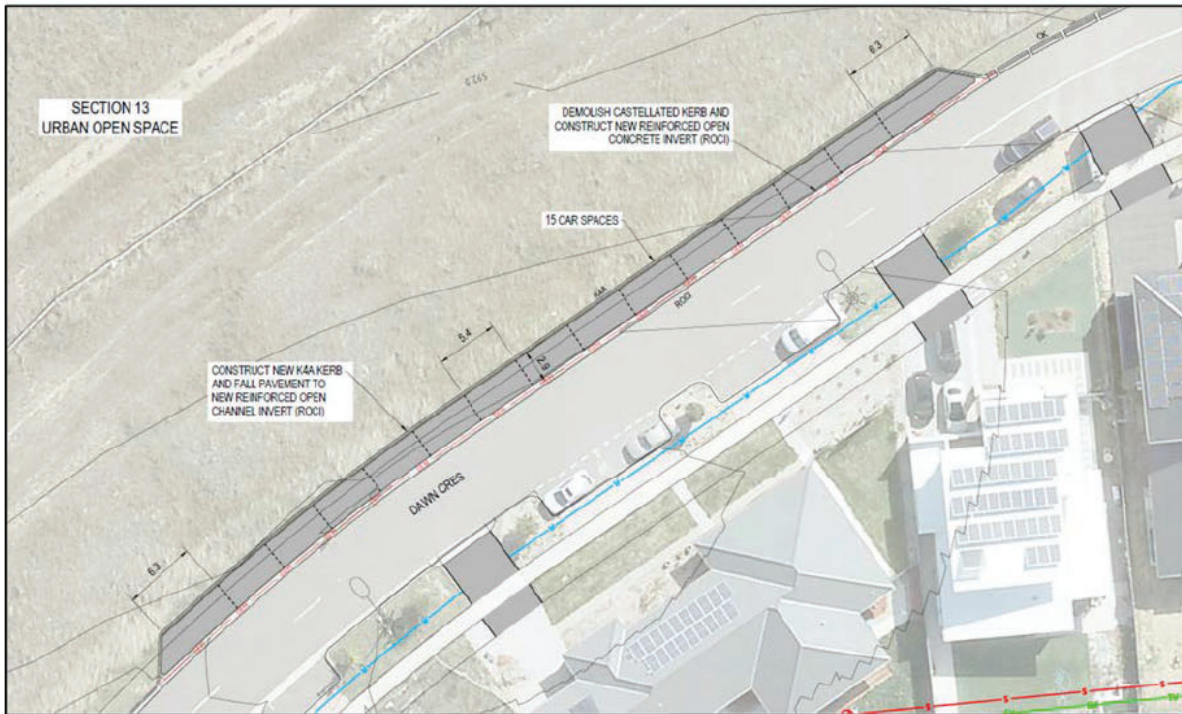
The preferred construction approach consists of demolishing the existing castellated kerb and constructing a new reinforced open channel invert that would direct stormwater to existing inlet sumps.

New K4A kerb at the back of the parking bays would be constructed with new pavement for parking spaces falling back towards the ROCI.

Should passive stormwater discharge to the open space be preferred, the ROCI would be replaced with a concrete edge strip, car park pavement would continue on a similar grade to the existing carriageway and new castellated kerb constructed at the back of the parking bays. This option is not currently preferred as site observations have indicated trapped low spots and occasional surface scouring occurring already at the back of the castellated kerb. The additional surface area that would generate more stormwater runoff could increase the scouring affect.

An additional 15 parallel car parking spaces can be constructed, with end bays being 6.3m long and standard internal 5.4m bays elsewhere. To assist with end bay manoeuvrability, 45 degree kerb alignments have been provided. Car park space depths of 2.9m are proposed for door opening clearances and larger wider vehicles don't extrude into the travel lane.

Figure 3-8 Extract Sketch Drawing - Dawn Crescent – Proposed Car Park Layout



3.2.2 Jumbuck Crescent – West – Section 1 – Existing Conditions

The current road cross section of Jumbuck Crescent consists of a two-way 7.5m wide carriageway. Indented car parking spaces have been constructed on the 8.25m wide verge facing the residential blocks, with unrestricted on street parking along the northern-western 2.0m wide verge adjacent to open space. A 1.5m wide path is provided along the residential blocks verge, no footpath is located on the northern verge.

Figure 3-9 Aerial view of Jumbuck Crescent – Section 1



The majority of the existing services are located on the southern verge close to the residential blocks, responding to the road cross section, stormwater inlet sumps are located along the northern verge. Landscape rock retaining walls are located in the open space.

Figure 3-10 Jumbuck Crescent existing road details showing existing indented car parking



3.2.2.2 Car Parking Options

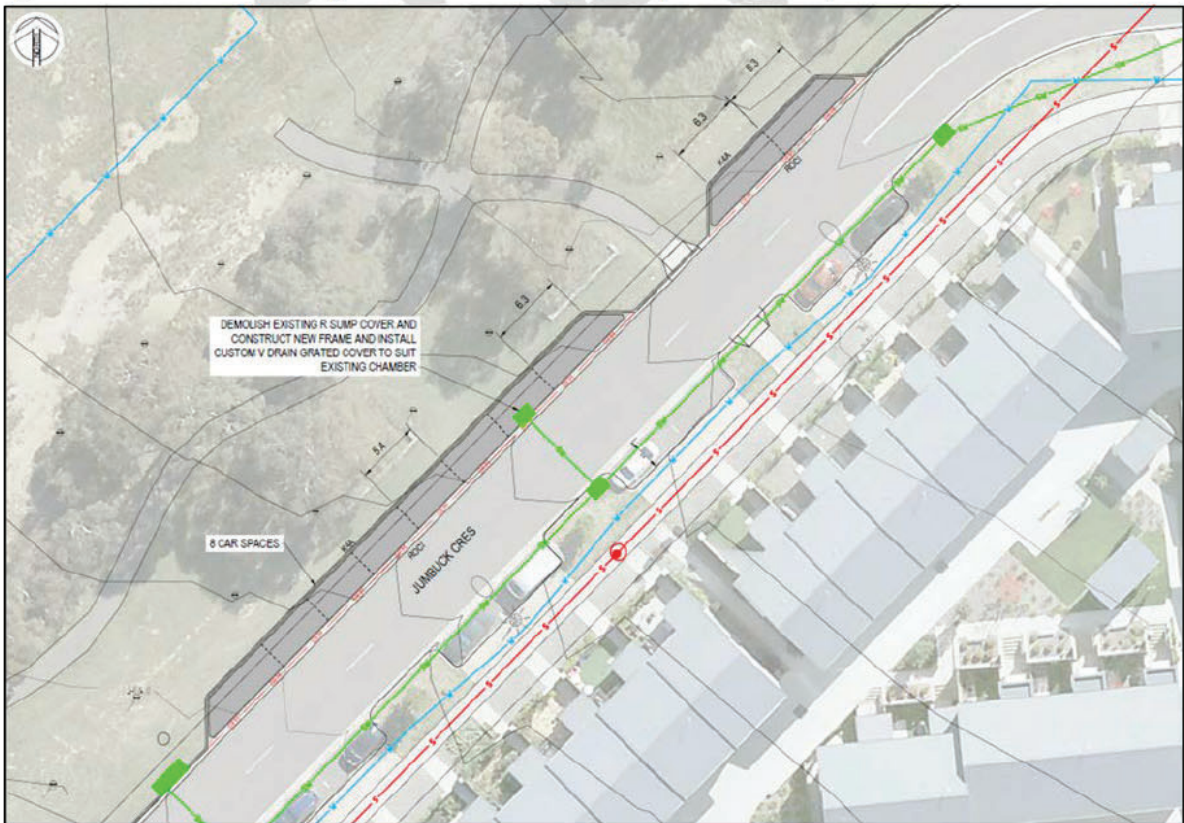
Indented parallel car parking is proposed along Section 1 of Jumbuck Crescent.

The preferred construction approach consists of demolishing the existing kerb and gutter, constructing a new reinforced open channel invert that would direct stormwater to existing inlet sumps. One existing stormwater inlet sump would be impacted, the proposal would retain the sump and reconstruct the cover and install a custom grated inlet cover to suit the ROCI alignment.

New K4A kerb at the back of the parking bays would be constructed with new pavement for parking spaces falling back towards the ROCI.

An additional 10 parallel car parking spaces can be constructed, with end bays being 6.3m long and standard internal 5.4m bays elsewhere. To assist with end bay manoeuvrability, 45 degree kerb alignments have been provided. Car park space depths of 2.9m are proposed for door opening clearances and larger wider vehicles don't extrude into the travel lane.

Figure 3-11 Extract Sketch Drawing - Jumbuck Crescent – Section 1 Proposed Car Park Layout



3.2.3 Jumbuck Crescent – East – Sections 2 and 3 – Existing Conditions

The current road cross section of Jumbuck Crescent consists of a two-way 7.5m wide carriageway. Indented car parking spaces have been constructed on the 8.25m wide verge facing the residential blocks, with unrestricted on street parking along the northern-western 2.0m wide verge adjacent to open space. A 1.5m wide path is provided along the residential blocks verge, no footpath is located adjacent the northern verge. There is a short open space path link between Jumbuck Crescent and Dawn Crescent. Kerb and gutter are along the length of Jumbuck Crescent.

Figure 3-12 Aerial view of Jumbuck Crescent – Section 2 and Section 3



Similar to all other streets within Lawson, the existing services are generally located on the verge fronting the residential development.

The exception being the existing stormwater pipe system, which is located on the open space verge from Dawn Crescent intersection to the corner (Section 2), where it crossing the road and is located on the block frontage up to the intersection with Stockman Avenue (Section 3).

Considering the existing site conditions, the opportunity to construct additional car parking measures along Section 1 of the road should have minimal impact to existing services and be relatively easily to construct.

Figure 3-13 Jumbuck Crescent – Section 2 - existing road details



Section 3 of Jumbuck Crescent is very similar to Section 2 and by adopting the same design approach of 30 degree parking, an additional 12 spaces can be easily accommodated along the open space verge.

The impacted stormwater inlet sump could be modified to a grated cover sump incorporated into a new OCI.

Figure 3-14 Jumbuck Crescent – Section 3 - existing road details



3.2.3.2 Car Parking Options

Indented parallel car parking is proposed along Section 2 and 3 of Jumbuck Crescent.

The preferred construction approach consists of demolishing the existing kerb and gutter, constructing a new reinforced open channel invert that would direct stormwater to existing inlet sumps. One existing stormwater inlet sump would be impacted, the proposal would retain the sump and reconstruct the cover and install a custom grated inlet cover to suit the ROCI alignment.

New K4A kerb at the back of the parking bays would be constructed with new pavement for parking spaces falling back towards the ROCI.

An additional 11 parallel car parking spaces can be constructed at Section 2, with end bays being 6.3m long and standard internal 5.4m bays elsewhere. To assist with end bay manoeuvrability, 45 degree kerb alignments have been provided. Car park space depths of 2.9m are proposed for door opening clearances and larger wider vehicles don't extrude into the travel lane.

Adopting the same design approach as above, Section 3 of Jumbuck Crescent can provide an additional 13 car park spaces.

Figure 3-15 Extract Sketch Drawing - Jumbuck Crescent – Section 2 Proposed Car Park Layout

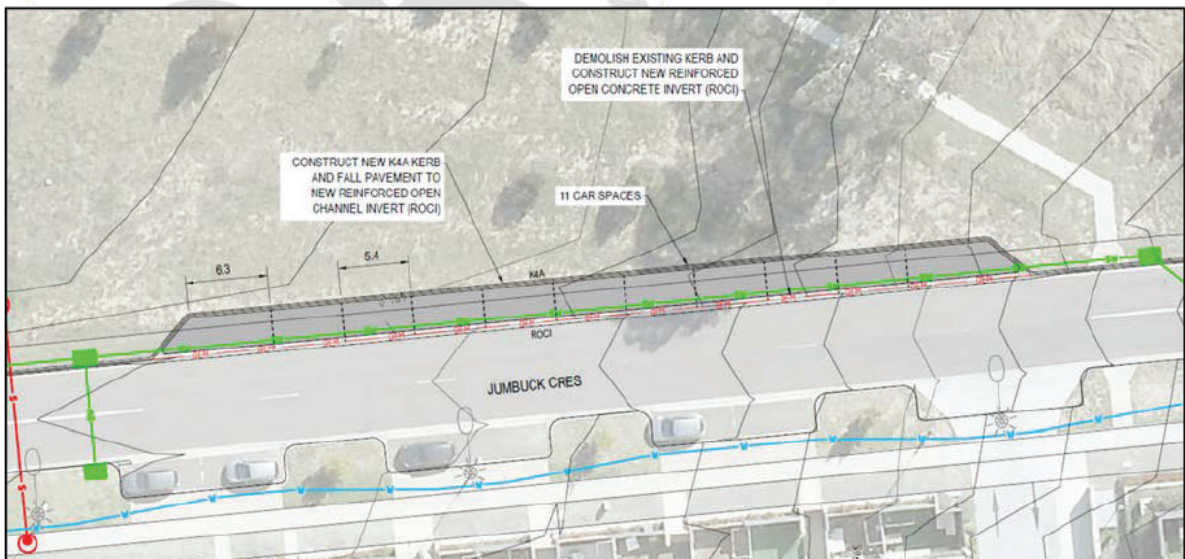
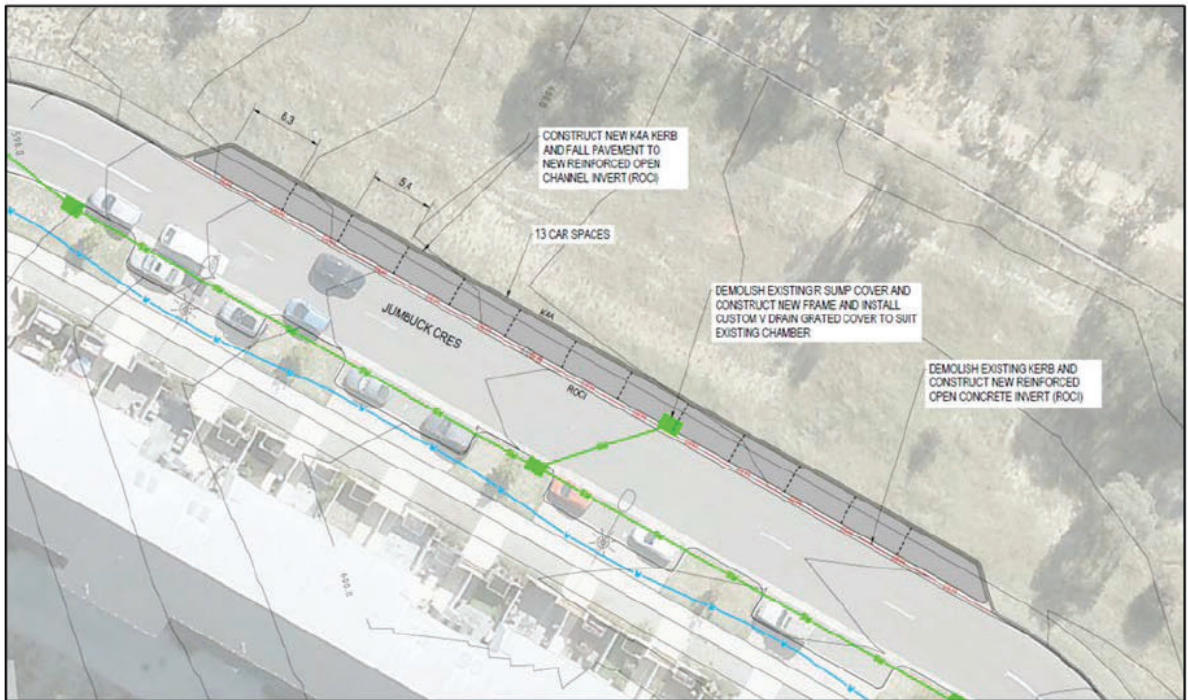


Figure 3-16 Extract Sketch Drawing - Jumbuck Crescent – Section 3 Proposed Car Park Layout



DRAFT

APPENDIX

A

PARKING SURVEY RESULTS

DRAFT

APPENDIX

B

SKETCHES

About Cardno

Cardno is a professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

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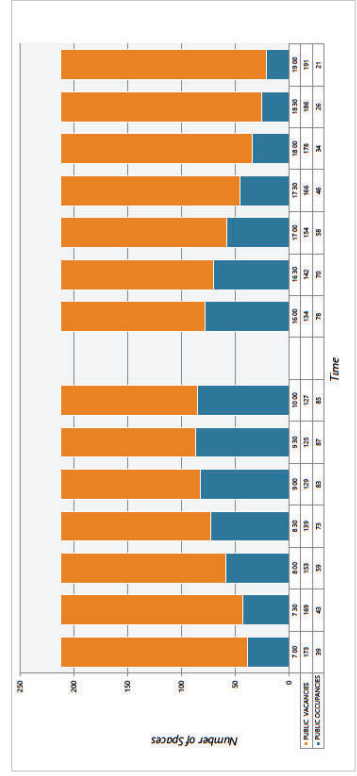
Parking Occupancy Survey

Date: Wednesday, 28 April 2021
 Location: Lawson
 GPS: [blank]
 Time: [blank]
 Quarter: [blank]
 District: [blank]

Note: Indented Parkings - Parking bays offset from trafficable lane
 On Street - Legal parking bays on trafficable lane

Public Parking (10)	Map Ref	Street	Section	Side	Restriction	Capacity	Parking Occupancy													
							7:00	7:30	8:00	8:30	9:00	9:30	10:00	16:30	17:00	17:30	18:00	18:30	19:00	
1		Wanderlight Ave	Giminderra Dr to Nevertle St	N	Unrestricted (indented)	8	3	3	6	8	8	8	8	8	8	8	5	4	3	2
1				N	Unrestricted (On Street)	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				S	Unrestricted (On Street)	36	6	8	16	18	20	22	21	18	16	10	9	6	6	3
1			Nevertle St to Outback St	E	Unrestricted (indented)	16	6	6	8	10	12	11	11	13	11	10	7	3	3	3
1				E	Unrestricted (On Street)	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				W	Unrestricted (indented)	6	3	4	4	6	6	6	6	6	6	6	5	4	4	4
1				W	Unrestricted (On Street)	6	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1			Outback St to Coopers Rise	E	Unrestricted (On Street)	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				W	Unrestricted (On Street)	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1			Wanderlight Ave to Nevertle St	N	Unrestricted (On Street)	11	1	1	1	2	2	3	3	2	2	2	2	2	1	1
1				S	Unrestricted (indented)	8	4	4	4	5	5	6	6	6	6	6	5	4	4	4
1			Wanderlight Ave to Bend	N	Unrestricted (indented)	4	1	2	2	3	3	3	3	3	3	2	2	2	1	1
1				N	Disable (indented)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				N	Unrestricted (On Street)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				S	Unrestricted (On Street)	11	4	3	4	5	5	5	5	4	3	3	3	2	2	2
1			Bend to Outback St	E	Unrestricted (On Street)	30	8	8	10	11	16	16	16	12	12	11	6	4	2	1
1				W	Unrestricted (indented)	7	3	4	4	5	5	5	5	6	3	3	3	2	0	0
1				W	Unrestricted (On Street)	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1			Outback St to Coopers Rise	E	Unrestricted (On Street)	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1				W	Unrestricted (On Street)	8	0	0	0	0	1	1	0	0	0	0	0	0	0	0
PUBLIC CAPACITY							212	212	212	212	212	212	212	212	212	212	212	212	212	212
PUBLIC OCCUPANCIES							39	43	59	73	83	87	85	78	70	58	46	34	26	21
PUBLIC VACANCIES							173	169	153	139	129	125	127	134	142	154	166	178	186	191
PUBLIC % OCCUPANCIES							18%	20%	28%	34%	39%	41%	40%	37%	33%	27%	22%	16%	12%	10%

not available for public parking



TRANS TRAFFIC SURVEY

Map and Surveyed Area

trafficsurvey.com.au



Lawson 1



Lawson 2



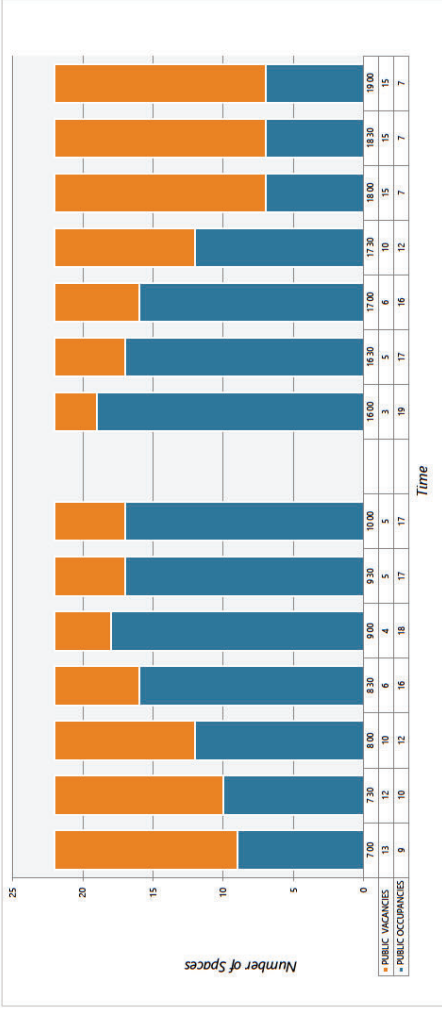


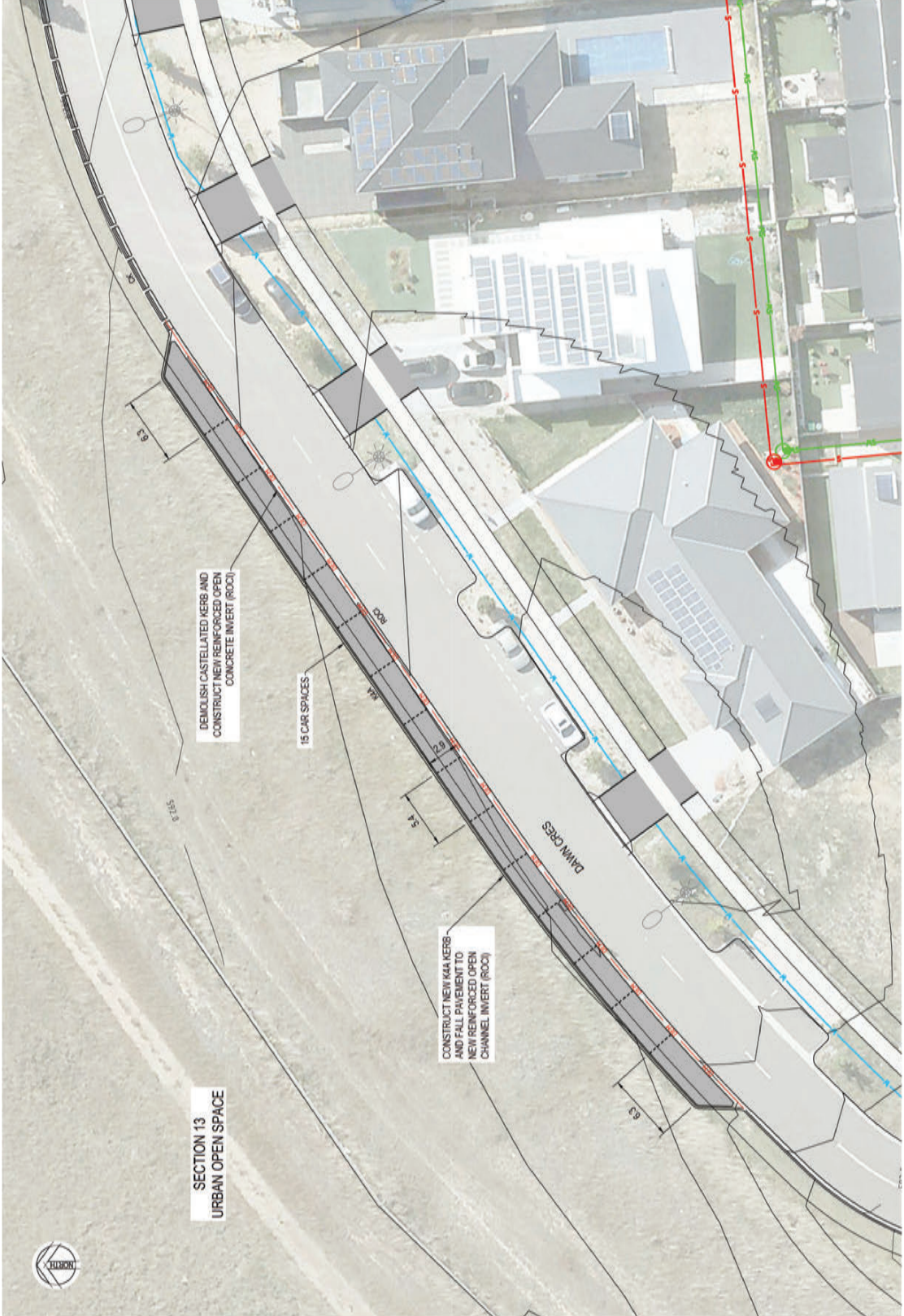
Parking Occupancy Survey

Date:	Wednesday, 23 April 2021
Location:	Lawson
GPS:	
Weather:	Fine
Customer:	Cardio

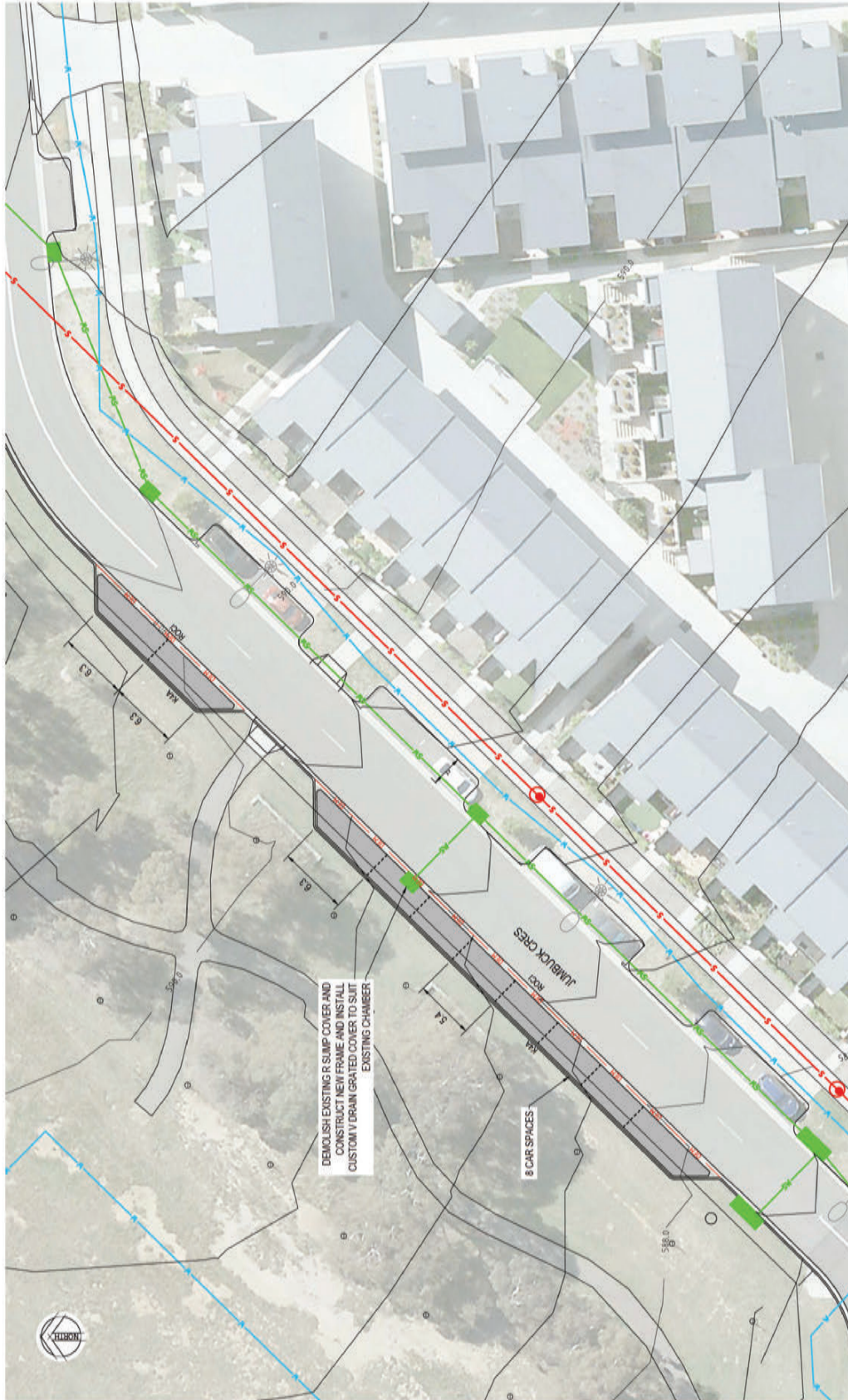
Note: Indented Parkings - Parking bays offset from trafficable lane
 On Street - Legal parking bays on trafficable lane

Public Parking (1/10)	Map Ref Street	Section	Side	Restriction	Capacity	Parking Occupancy													
						7:00	7:30	8:00	8:30	9:00	9:30	10:00	16:00	16:30	17:00	17:30	18:00	18:30	19:00
1		Neverlie St to Outback St	E	Unrestricted (Indented)	16	6	6	8	10	12	11	11	13	11	10	7	3	3	3
1			E	Unrestricted (On Street)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1			W	Unrestricted (Indented)	6	3	4	4	6	6	6	6	6	6	6	5	4	4	4
1			W	Unrestricted (On Street)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PUBLIC CAPACITY						22	22	22	22	22	22	22	22	22	22	22	22	22	22
PUBLIC OCCUPANCIES						9	10	12	16	18	17	17	19	17	16	12	7	7	7
PUBLIC VACANCIES						13	12	10	6	4	5	5	3	5	6	10	15	15	15
PUBLIC % OCCUPANCIES						41%	45%	55%	73%	82%	77%	77%	86%	77%	73%	55%	32%	32%	32%
						not available for public parking													





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<p>Date: 13/04/2021 Drawn: [Blank] Checked: [Blank] Approved: [Blank]</p>	<p>Date: 13/04/2021 Date: 13/04/2021 Date: 13/04/2021 Date: 13/04/2021</p>	<p>Scale: AS SHOWN</p>	<p>Sheet: AT</p>	<p>Client: PARKING OPTIONS JIMBUCK CRES</p>	<p>Drawing Number: 50521061-C-1002</p>
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<p>NO</p>	<p>DATE</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>BY</p>	<p>APPROVED</p>
<p>A</p>	<p>13/04/2021</p>	<p>ISSUED FOR PRELIMINARY DETAIL DESIGN</p>	<p></p>	<p></p>	<p></p>



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Checker: [Blank]	Checker: [Blank]	Checker: [Blank]	Checker: [Blank]	Checker: [Blank]	Checker: [Blank]
Approver: [Blank]	Approver: [Blank]	Approver: [Blank]	Approver: [Blank]	Approver: [Blank]	Approver: [Blank]
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