



**Merri-bek**  
City Council

**Separately Circulated Reference Material**

**Item 9.2 – Notice of Rescission – De Carle Street Bicycle Lanes:**

Report 7.2 – De Carle Street Bicycle Lanes - 18 October 2023 Council Meeting

## 7.2 DE CARLE STREET BICYCLE LANES

Director City Infrastructure      Anita Curnow

Transport

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### Officer Recommendation

That Council:

1. Notes the consultation outcomes on the proposed implementation of cycling lanes and traffic calming treatments on De Carle Street, Coburg between Rennie Street and Moreland Road.
2. Approves the implementation of cycling lanes and traffic calming treatments on De Carle Street, between Moreland Road and Rennie Street as shown in Attachment 1.
3. Advises the community of Council's decision.

<b>REPORT</b>
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### Executive Summary

Provision of bike lanes on De Carle Street between Moreland Road and Rennie Street was identified in Council's capital works program for pedestrians and cyclists in 2019, and initially intended to be delivered in the 2021/22 financial year. The intent of the project is to deliver a high quality cycling route suitable for users of all confidence levels.

Community consultation has occurred on a few iterations of project designs between 2020 and 2023. The most recent period of consultation, in August and September 2023, sought feedback on the current project design which has sought to address issues from previous consultation on this project, as well as lessons learned from other bike infrastructure projects in Merri-bek.

The current project design delivers wider bike and traffic lanes than the previous design, as well as improved waste collection opportunities and zero impact to on-street parking. While the revised design does not provide separated bike lanes, it is considered appropriate for lower confidence cyclists due to low traffic volumes, and is similar to an existing, well-used bike route on Napier Street, Fitzroy.

Subject to Council's approval, communications will be sent to local properties informing them of upcoming works and changes to the street. Works will be tendered following Council approval and expected to occur prior to June 2024.

### Previous Council Decisions

#### De Carle Street Separated Bicycle Lanes – 9 June 2021

*That Council:*

1. *Notes the consultation outcomes on the proposed implementation of separated cycling lanes on De Carle Street, Coburg between Rennie Street and Moreland Road, as requested by Council in July 2020 (DCF27/20).*
2. *Approves the implementation of separated cycling lanes on De Carle Street*

#### Removal of Car Parking Spaces to Support Cycling Infrastructure – 8 July 2020

*That Council:*

...

3. *Consults with the local community on the detailed design for the De Carle Street, Coburg road narrowing and bike path construction which would require the removal of some parking and receives a report on the findings on the consultation with recommendations on the next steps prior to any construction.*

...

## 1. Policy Context

Council Plan 2021-2025

The Council plan sets out Council's and community's vision for the future. Key objectives and strategies related to this report include:

- 2. To contribute to the health, safety, and security of everyone living in our diverse community and to increase safe, accessible, physically active and enjoyable ways to get around Moreland, especially via walking, cycling and public transport.
  - 2.1. Build safe, accessible, and high-quality bike and pedestrian infrastructure to create links between areas of high pedestrian and cycling demand, especially the Coburg to Glenroy bike path.
  - 2.5. Facilitate substantially increased use of active transport in the community through targeted programs which include a focus on children, young people, families and older people.
  - 2.6. Collaborate with the community to improve pedestrian and cycling infrastructure on a case-by-case basis.

### **Moreland Integrated Transport Strategy (2019)**

The Moreland Integrated Transport Strategy 2019 is Council's current transport strategy, and it encourages greater take up of sustainable transport alternatives. The strategy includes actions which commit Council to:

- Reallocate road space and car parking according to the road user hierarchy (in descending order, pedestrians, cyclists, public transport users and motorists).
- Work together with state government to, among other things:
  - Continue to implement 40 km/h speed limits on local roads.
  - Install direct, safe and convenient crossings where lots of pedestrians and cyclists want to cross, even where VicRoads warrants aren't met.
  - Increase pedestrian and cyclist priority at signals and crossings.

### **Zero Carbon Merri-bek (2018)**

Council's Zero Carbon Merri-bek 2040 Framework outlines the community vision and strategic directions for the transition to zero carbon in Merri-bek by 2040. In 2019/20, transport was recorded to contribute 17 per cent of all carbon emissions in the Merri-bek local government area and 13 per cent were from private motor vehicles. The 2040 vision for Sustainable Transport includes:

- Most people choose to walk or cycle to get around locally because its healthy, free, safe and convenient.
- Merri-bek is known for its pedestrian and cycle-friendly streetscapes.

This overarching Framework informed 5-yearly action plans to drive the transition to zero emissions including:

- Investing in infrastructure to support active travel and public transport.
- Reallocate space used for private vehicle travel and parking to support sustainable transport use and other purposes.

In addition, Council resolved in December 2021 to adopt an interim target towards the Zero Carbon by 2040 goal of a reduction of emissions by 75 per cent by 2030.

## **Urban Heat Island Effect Action Plan (2016)**

In 2016 Council adopted the Urban Heat Island Effect Action Plan to create a city more resilient to urban heat and climate change. Protecting and enhancing tree canopy cover and green spaces are important considerations for future bicycle and pedestrian projects.

## **Community Engagement Policy (2020)**

Council's Community Engagement Policy (2020) aligns with the new Local Government Act 2020. It sets directions for how Council engages with the community on decisions that impact them, including future bicycle and pedestrian projects

## **2. Background**

Council's first 10-year capital works program for pedestrians and cyclists, adopted in June 2019 (DCF37/19), identified De Carle Street in Coburg as an alternative cycling route to Sydney Road. At this time this route was envisaged as a "shimmy route" with wayfinding signage only.

De Carle Street, Coburg between Rennie Street and The Avenue was identified for reconstruction in 2021/22 in Council's annual road reconstruction program. As such, this section of road was identified as an opportunity to reallocate road space to support sustainable transport modes in accordance with MITS 2019.

The project was initially identified in Council's 10-year capital works program for pedestrians and cyclists for delivery in 2021/22, however, works were delayed due to the COVID-19 pandemic.

An initial period of consultation occurred in January 2020, with letters sent to owners and occupiers of all properties on De Carle Street between Rennie Street and Moreland Road including Merri-bek Primary School (95 letters in total). The letter asked for feedback on a concept plan of the Rennie Street (The Avenue intersection, as well as an indicative cross-section of The Avenue) Moreland Road section.

Following Council's resolution in July 2020 (DCF27/20) to consult further with the community on the proposed changes to De Carle Street, letters were sent to the same properties in February 2021 seeking feedback on a concept plan of The Avenue – Moreland Road section.

A follow up letter was sent in March 2021 including further explanation of the proposed changes following feedback from a resident that more information was required to fully understand the proposed change.

Further consultation (online and via post) was undertaken in September 2023 on a revised design. The current design proposes to include painted bike lanes between Rennie Street and The Avenue as part of the road reconstruction of that road segment. This design does not include physical separation between bike lanes and vehicle traffic but allows for wider bike lanes and retention of parking. This will allow for parking on both sides of the road. The concept plan for this section of De Carle Street is shown in **Attachment 1**.

## **3. Issues**

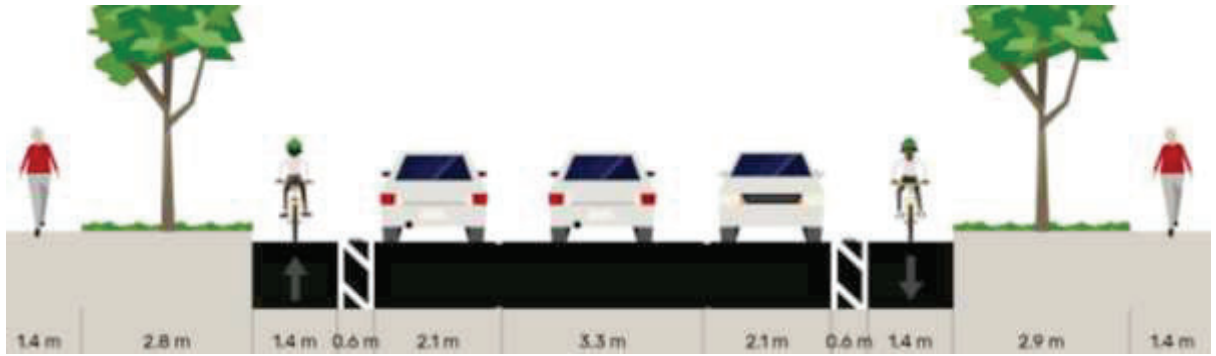
### **Summary of changes from earlier cross-section**

#### ***Moreland Road to The Grove***

The key changes in the newer cross-section are:

- Bike lane width has been increased from 1.4 metres to 1.9 metres (including 0.8 metre car door buffer).
- Traffic lane width has been increased from 3.3 metres to 3.5 metres.

The two cross-sections are shown in Image 1 and Image 2 below, respectively.



*Image 1: Previously Endorsed Cross Section – Moreland Road to The Grove*



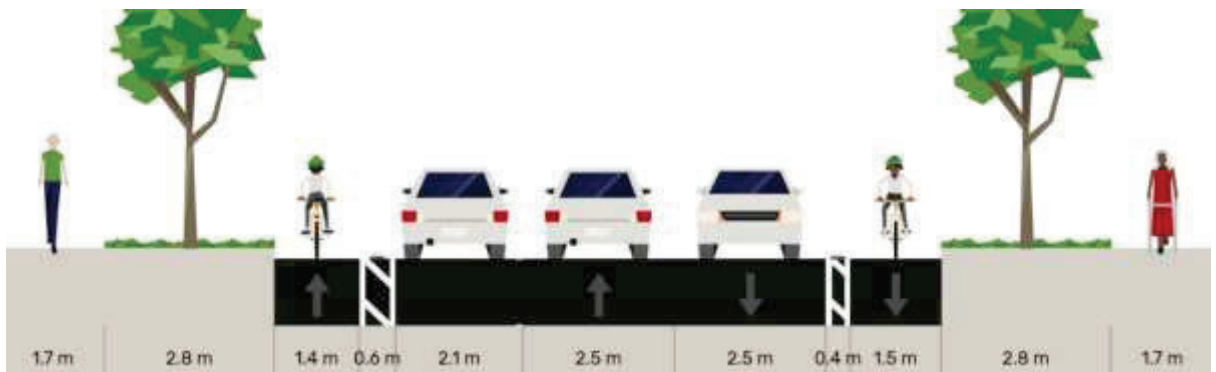
*Image 2: Proposed Cross Section – Moreland Road to The Grove*

***The Grove to Rennie Street***

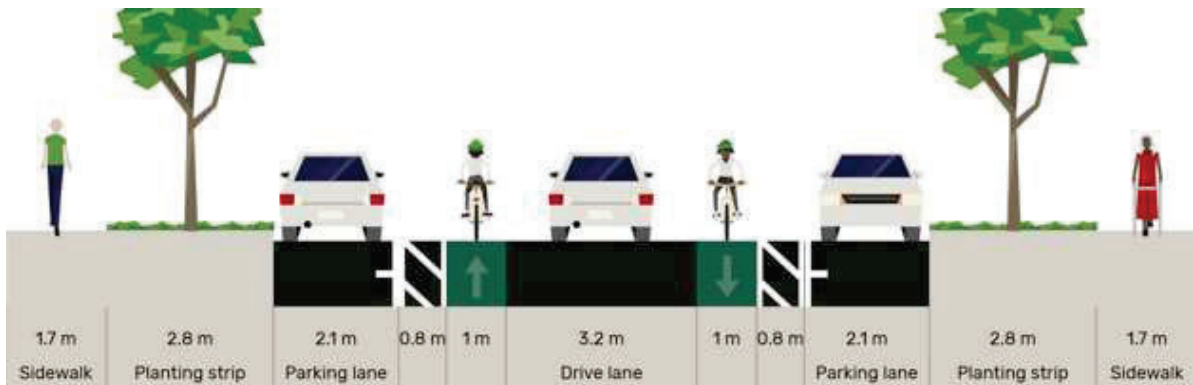
The key changes in the newer cross-section are:

- Bike lane width has been increased from 1.4 metres to 1.8 metres (including 0.8 metre car door buffer).
- Traffic lanes have been changed from two 2.5 metre lanes to a single 3.2 metre lane.

The two cross-sections are shown in Image 3 and Image 4 below, respectively.



*Image 3: Previously Endorsed Cross Section – The Grove to Rennie Street*



*Image 4: Proposed Cross Section – The Grove to Rennie Street*

**Rationale for changes**

For cyclists, the revised design provides increased lane width, including greater overtaking opportunities, and a better riding surface compared to the original design (in which cyclists would ride near bluestone gutter stones and drainage pits).

It is noted that the revised design no longer provides physical separation between cyclists and motorists; however, this is considered acceptable due to the low vehicle volumes and speeds on De Carle Street. Victorian Government guidance considers local streets with traffic calming to achieve safe conditions for cycling to be an infrastructure typology suitable for less confident cyclists, along with physically separated cycling routes. Traffic volumes on De Carle Street have already been reduced through vehicle turning restrictions at the Moreland Road intersection, and speeds and volumes will be further managed through additional speed humps.

For motorists, the revised design provides additional space to assist vehicles travelling in opposing directions to pass each other. This addresses relevant issues raised through the Kent Road, Pascoe Vale bike lane trials in terms of ease of passing for drivers.

The revised design will require drivers to move briefly into the bike lane, giving way to cyclists, in order to pass drivers moving in the opposite direction. This type of design has been employed successfully at other locations, including on Napier Street, Fitzroy, as shown below in Figure 5. This design is considered appropriate and safe for streets with lower vehicle volumes and speeds, as is the case on De Carle Street.



*Image 5: Example of a similar type of the proposed design in Napier Street, Fitzroy.*

Recent traffic counts on De Carle Street indicate roughly 2200 vehicles use the street per weekday. The project infrastructure is expected to reduce traffic volumes and speeds on the street to a level considered appropriate for this style of bikeway treatment. A target of 1500 vehicles or less per day is desired for the street to optimise the safety, comfort and amenity of the street for people walking and cycling while ensuring the street is not being used inappropriately by through traffic. Traffic volumes will continue to be monitored on the street and further measures will be considered if the target volume of less than 1500 vehicles per day is not reached within 12 months.

It was not considered feasible to widen the road carriageway (distance between kerbs) to allow for wider lanes, due to the presence of significant trees.

The revised design will provide more opportunities for waste collection and placement of household bins, compared to the original design.

The revised design also results in zero reduction to on-street parking spaces on De Carle Street (compared to a reduction of eight spaces in the earlier design) however this was not a priority justification for the revised design, as parking occupancy in the area is low with many properties having off-street parking.

### Consultation feedback

During the recent period of engagement on the proposed design in August and September 2023, feedback was sought online and via posted mail to residents living on or nearby De Carle Street. The letter sought feedback via the Conversations Merri-bek engagement page that was also available to other members of the public. Most respondents indicated that they lived near De Carle Street (55 per cent), travelled on De Carle Street (70 per cent) or were connected to Merri-bek Primary School (33 per cent).

The survey responses indicated broad support for improving cycling conditions at this location. While few responses expressed outright objection to the proposed upgrades in favour of the current layout of De Carle Street, there were also few who expressed outright support for the design with most responses reflecting concerns regarding safety, traffic behaviour or a preference for physically separated bike lanes.

A key theme of the responses indicated a preference for separated cycling lanes rather than the current proposed design. Another key theme was suggestions for more aggressive measures to reduce the volume and speed of vehicles on the street such as modal filters.

Other issues raised included concerns that drivers would not safely pull into the advisory bicycle lanes when yielding to other drivers, and that insufficient detail was provided on conditions at roundabouts.

A summary of the key issues raised, and a response to those issues is detailed in the table below.

Issue	Response
A preference for separated bicycle lanes or/and modal filters to calm traffic and protect bike riders.	As detailed previously in this report, it is not considered feasible to deliver separated lanes while maintaining on-street parking and two-way vehicle travel within the current road carriageway. It is also deemed unfeasible to widen the carriageway to accommodate separated lanes.  The current design is considered appropriate to meet the needs of less confident cyclists, particularly considering the low traffic volumes on De Carle Street. Recent vehicle turn bans implemented at the Moreland Road intersection have resulted in a drop in traffic volumes to around 2,200 vehicles per weekday. However, the turning ban infrastructure, which is managed by the Department of Transport and Planning, needs reinstatement to further prevent inappropriate use of

Issue	Response
	<p>this street and reduce traffic volumes further. Council Officers will request this be actioned by the state government to enhance the safety and comfort for bicycles using the street. It is expected that the traffic lane narrowing and calming features installed as part of the project will further deter rat-running traffic and ensure lower vehicle volumes. A target of 1,500 vehicles or lower will be set for this section of De Carle Street and traffic counts will be monitored in the 12 months following installation to assess whether further traffic calming measures are required to meet this target.</p>
<p>Safety concerns relating to narrow traffic lanes</p>	<p>The design will require motorists to yield and briefly move into the bike lane, giving way to cyclists, to pass motorists moving in the opposing direction. This is considered to be safe, including through the expected impacts of this design in managing vehicle speeds and volumes on De Carle Street. It should be noted that the current proposed design results in wider traffic lanes than in the previous version of the design.</p>
<p>Confusion around operation of two-way traffic in a single lane</p>	<p>It is noted that this type of road cross-section has not yet been used in the municipality; however, nearby examples such as Napier Street, Fitzroy indicate this approach is well understood by cyclists and motorists once implemented.</p>
<p>Concerns relating to roundabouts being difficult for cyclists</p>	<p>Cycling through roundabouts can be difficult for people with low level of confidence as it requires cyclists to claim the lane. Roundabouts with minimal deflection can result in higher vehicle speeds and increase risk to people riding bikes.</p> <p>Council has annual funding to remove or improve roundabouts to be better suited for cyclists and pedestrians. Speed cushions and treatments will be implemented at all approaches to roundabouts to ensure appropriate vehicle speeds and improve safety.</p>

No further changes are proposed to the project design as a result of consultation feedback.

### **Human Rights Consideration**

The proposed project potentially engages the right to recognition and equality before the law (section 6 of the Charter of Human Rights and Responsibilities Act 2006) and the right to freedom of movement (section 12).

It is also not considered that the proposed narrowing of the traffic lane adversely impacts the human rights of any person, as vehicle access is retained for all motorists, although speeds are likely to be reduced at times.

The proposed project positively impacts the right to freedom of movement for people using bicycles and is likely to positively impact this right for pedestrians through reduced traffic and improved safety.

Overall, the proposed project is likely to make a positive impact to human rights and is not likely to unreasonably impact the human rights of any person.

### **Gender Impact Assessment**

Overall, across Merri-bek and in most part of Melbourne, more men than women cycle. Research indicates that a significant factor in this gender disparity is safety concerns. Where quality bike routes are provided through infrastructure or reduced traffic volumes, the gender disparity is smaller or does not exist.



As such, the provision of cycling infrastructure is likely to positively impact on gender equity by increasing participation in cycling among women and providing additional transport options for women.

There appears to be little evidence on the relationship between safety and gender differences in cycling in relation to non-binary and gender diverse people.

As described in the human rights assessment, it is considered that this project is unlikely to adversely impact the rights of any person, including women and gender diverse people.

#### **4. Community consultation and engagement**

As described in Sections 2 and 3 of this report, consultation was undertaken with owners and occupiers of adjoining properties and the wider area through mailouts including plans and cross-sections, and a link to a Council webpage with more information. A Variable Message Sign (VMS) was also placed in the street to advise of consultation to encourage non-local road users to submit feedback.

Subject to Council approval, communications will be sent to local properties of upcoming works and changes to the street.

##### **Affected persons rights and interests**

Before making a decision that affects a person's rights, Council must identify whose rights may be directly affected and provide an opportunity for that person (or persons) to convey those views regarding the effect on their rights and consider those views.

Affected homeowners and occupiers, and key stakeholders were consulted at various points throughout the planning of this project. They were invited to provide feedback, and to discuss concerns further with officers if desired. The feedback gathered at these points has informed the final design.

##### **Communications**

Subject to Council's approval, letters will be sent to local properties, and the school, of upcoming works and changes to the street. Updates will be published to Council's Conversations Merri-bek engagement platform to notify of Council's decision, and of further project updates throughout the construction.

#### **5. Officer Declaration of Conflict of Interest**

Council officers involved in the preparation of this report have no conflict of interest in this matter.

#### **6. Financial and Resources Implications**

The 2023/24 capital works program for pedestrians and cyclists includes \$228,000 for installation of bicycle lanes on De Carle Street and \$136,000 for Road renewal improvement outcomes, which has been carried forward to allow this consultation to occur ahead of construction.

#### **7. Implementation**

Both projects for De Carle Street are planned to be constructed during the 2023/24 financial year. Works will be tendered for construction once approval is granted. Timing will be coordinated once the contractors have been engaged.

An indicative timeframe for construction is for works to be completed before June 2024.

Notification of works will occur once the timeframes are known.

#### **Attachment/s**

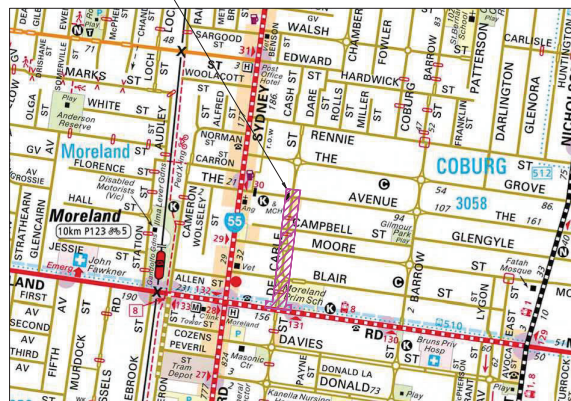
- [1](#) De Carle Street Concept Design Plans D23/457616

# DE CARLE STREET, COBURG BIKE LANE CONCEPT PLAN

### GENERAL NOTES

1. ALL DISTURBED AREAS OF PAVEMENT, PAVING, K&C, FOOTPATH MUST BE SAW-CUT NEATLY BEFORE EXCAVATION.
2. THE SERVICES SHOWN ON THESE PLANS ARE FOR DESIGN PURPOSES ONLY. ALL SERVICES ARE TO BE PROVEN ON-SITE BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORK AND PROTECTED FOR THE DURATION OF THE WORKS. LOCATIONS OF UNDERGROUND SERVICES SHOWN ON PLAN ARE INDICATIVE ONLY. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. CONTRACTOR IS TO VERIFY ALL SERVICES CROSSING PROPOSED UNDERGROUND DRAINS IN A FULL RECONSTRUCTION AREAS PRIOR TO COMMENCING CONSTRUCTION AND NOTIFY THE SUPERINTENDENT OF ANY CONFLICT IMMEDIATELY. CONTRACTOR IS TO ALLOW ADEQUATE TIME IN HIS WORK PROGRAM FOR COUNCIL TO MODIFY THE DESIGN OR TO ARRANGE MODIFICATIONS OF SERVICES. COUNCIL WILL NOT ENTERTAIN ANY CLAIM FOR THE DELAY IN MODIFICATIONS OF SERVICES BY SERVICE PROVIDERS.
3. ALL DISTURBED VEHICLE CROSSINGS TO BE REINSTATED UP TO THE EDGE OF FOOTPATH UNLESS SHOWN OTHERWISE, IN ACCORDANCE WITH AT103 OR AT104 IN CASES OF REVERSE FALL.
4. ALL PRAM CROSSINGS TO BE REINSTATED IN ACCORDANCE WITH A5064, INCLUDING THE INSTALLATION OF TACTILE GROUND SURFACE INDICATORS. INSTALL NEW "WARNING" TACTILE GROUND SURFACE INDICATORS TACTILE GROUND SURFACE INDICATORS TO BE FIBRE REINFORCED POLYMER, CHEMICALLY AND MECHANICALLY FIXED AT 8 POINTS WITH TIE-ANCHOR SCREWS & PLUGS, WHITE IN COLOUR WITH A MINIMUM SLIP RESISTANCE OF PS 0.05 AS PER AS/NZS 4238.1:2009 AND SUPPLIED BY ESP ACCESS TACTILE SYSTEMS Tel: 1900 445 761 OR COUNCIL APPROVED EQUIVALENT.
5. EXISTING FOOTPATHS ARE TO BE RETAINED, EXCEPT WHERE SHOWN AND SPECIFIED BY COUNCIL'S SUPERVISING OFFICER. REINSTATEMENT OF FOOTPATH SHALL BE IN ACCORDANCE WITH AT101.
6. EXISTING TREES TO BE RETAINED. CONTRACTORS TO TAKE CARE TO ENSURE THAT NO DAMAGE OCCURS TO TREES. CONTRACTORS NOT TO PLACE SOIL FROM EXCAVATIONS, BULK MATERIALS OR HARMFUL MATERIAL WITHIN TREE DROP LINES.
7. WHILE CONSTRUCTION WORKS ARE IN PROGRESS A PERIMETER FENCE IS TO BE ESTABLISHED AND MAINTAINED TO PROTECT OPEN SPACE AND VEGETATION UNTIL REQUIRED TO BE REMOVED FOR ROAD WORKS. A TEMPORARY WIRE FENCE IS TO BE ERECTED BY THE CONTRACTOR TO COUNCIL'S SATISFACTION TO PROTECT THE OPEN SPACE AND VEGETATION WITH SIGNS ON EACH SIDE WHICH STATE THAT THIS IS A TREE-INDIGENOUS VEGETATION PROTECTION ZONE - NO ENTRY. FOR TREES THE FENCE SHOULD BE AROUND THE DROP LINE (AT EDGE OF THE TREE CANOPY) OR 3 METRES FROM THE EDGE OF THE TRUNK AT BREAST HEIGHT OR UP TO KERB/FOOTPATH/VEHICLE CROSSING ZONE, WHICHEVER IS THE GREATER, AND FOR INDIGENOUS VEGETATION SURROUNDING THE WHOLE AREA TO BE PROTECTED. THE AREAS WITHIN THE FENCE ARE TO BE KEPT FREE OF CONSTRUCTION MATERIAL AND DEBRIS. IN PARTICULAR DO NOT PLACE BULK MATERIALS OR HARMFUL MATERIALS ON, UNDER OR NEAR PROTECTED VEGETATION. DO NOT PLACE SOIL FROM EXCAVATIONS AGAINST TREE TRUNKS. PREVENT ANY DAMAGE TO TREE BARK. DO NOT ATTACH STAYS, GUYS AND LIKE TO TREES. NO SPLITLAGE IS TO BE STORED ON OPEN SPACE. ACCESS THROUGH ANY OPEN SPACE TO THE CONSTRUCTION SITE IS NOT ACCEPTABLE UNLESS PERMISSION IS SOUGHT FROM COUNCIL, AND A ROAD IS NEGOTIATED TO COVER ANY DAMAGE TO VEGETATION.
8. ALL DRAINAGE PIPE LARGER THAN 100mm DIAMETER TO BE STEEL OR FIBRE REINFORCED CONCRETE RUBBER RING JOINTED, CLASS 2 - UNLESS SPECIFIED OTHERWISE, Laid IN ACCORDANCE WITH A1432.
9. ALL AREAS OF PAVEMENT, K&C, FOOTPATH AND MALKESTEPS DISTURBED BY THE CONSTRUCTION OF UNDERGROUND DRAIN MUST BE REINSTATED TO THE ORIGINAL CONDITIONS.
10. ADJUST ALL DISTURBED VALVES, PITS, MANHOLES TO MATCH NEW SURFACE LEVELS.
11. ALL HOUSE DRAINS TO BE RENEWED UP TO THE BUILDING LINE UNLESS SHOWN OTHERWISE, CONNECTING TO NEW/EXISTING UNDERGROUND DRAIN AS PER A1434. AN INSPECTION OPENING (IO) SHOULD BE PROVIDED AT ALL HORIZONTAL AND/OR VERTICAL BENDS WITH A FITTED BOX IF THE IO IS LOCATED IN PAVED AREAS. AN "IO" OR "O" MARK IS TO BE STAMPED ON KERB TO MARK THE LOCATION OF THE IO, BEHIND THE KERB.
12. SOME HOUSE DRAIN PIPES MAY CONTAIN ASBESTOS. CONTRACTOR TO TAKE EXTREME CARE NOT TO DISTURB SUSPECTED PIPES. REMOVAL AND DISPOSAL OF ASBESTOS PIPES SHALL BE UNDERTAKEN BY LICENSED ASBESTOS REMOVAL SPECIALISTS ONLY.
13. ALL LINEMARKING IS TO BE APPLIED USING COUNCIL APPROVED THERMOPLASTIC LONG LIFE PAINT.

SITE OF WORKS



LOCALITY PLAN

### TREE MANAGEMENT NOTES:

THE CONTRACTOR IS TO ENGAGE A SUITABLY QUALIFIED ARBORIST TO:

1. PREPARE A MANAGEMENT PLAN FOR ALL WORKS WITHIN TREE ZONES AND PRESENT TO COUNCIL'S CONSTRUCTION ENGINEER WHO WILL FORWARD ONTO THE OPEN SPACE MAINTENANCE UNIT FOR COMMENT AND APPROVAL PRIOR TO WORKS COMMENCING.
2. ONCE THE TREE MANAGEMENT PLAN IS APPROVED AND PRIOR TO WORKS COMMENCING, CONTRACTOR IS TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE PROJECT ARBORIST (APPOINTED BY THE CONTRACTOR), COUNCIL ARBORIST AND COUNCIL CONSTRUCTION ENGINEER.
3. UNDERTAKE ARBORICULTURAL SUPERVISION OF ALL EXCAVATION WORKS WITHIN THE TREE ZONES AS PER AUSTRALIAN STANDARDS.
4. PROVIDE AN INSPECTION REPORT TO COUNCIL'S CONSTRUCTION ENGINEER POST-CONSTRUCTION, EITHER GIVING TREES A CLEAN BILL OF HEALTH OR MITIGATION STRATEGIES WHEN THEY HAVE BEEN STRESSED BY THE CONSTRUCTION WORKS. THESE WORKS ARE TO BE UNDERTAKEN BY THE CONTRACTOR AT THEIR OWN EXPENSE.

DRAWING INDEX	
SHEET No.	DESCRIPTION
1	LOCALITY PLAN, GENERAL NOTES & DRAWING INDEX
2 - 5	CONCEPT PLAN

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE DRAWING OR INFORMATION PROVIDED  
IS FOR INFORMATION ONLY. IT IS NOT TO BE  
USED AS A BASIS FOR ANY DECISIONS  
MADE BY ANY PERSONS OTHER THAN THE  
DESIGNER OR THE CONTRACTOR.  
THE USER SHALL BE RESPONSIBLE FOR  
VERIFYING THE LOCATION AND DEPTH OF  
ALL SERVICES PRIOR TO ANY WORKS.

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**NOTE:**  
THE APPOINTED CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE COUNCIL, CRE CONSULTING ENGINEERS (SEE) AND ITS EMPLOYEES INCLUDING SIGN CONTRACTOR AGAINST ANY CLAIM FOR INJURY, LOSS OR DAMAGE THAT IS MADE BEING OUT OF THE NEGLIGENCE ACTS OR OMISSIONS OF THE CONTRACTOR. ALL INFORMATION PROVIDED ON THESE PLANS SHALL BE CHECKED BY THE APPOINTED CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IF THERE ARE ANY ERRORS, POSSIBLE AMBIGUITY OR INCONSISTENCY NOT UNDERSTOOD BY THE CONTRACTOR, THEN THE CONTRACTOR SHOULD CONTACT COUNCIL'S SUPERINTENDENT IMMEDIATELY FOR CLARIFICATION. COUNCIL SHOULD BE GIVEN THE OPPORTUNITY AND SUPPORTIVE TIME TO INVESTIGATE, PRIOR TO ANY CONSTRUCTION COMMENCING OR CONTINUING. CRE WILL NOT BE HELD RESPONSIBLE OR LIABLE AGAINST ANY CLAIM MADE FOR MISINTERPRETATION OF THE SUPPLIED PLANS.

**NOTE:**  
ALL NOTED "ARBORIST" SERVICES INCLUDING GAS PRUNING, WATER PRUNING, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE & COMPENT THAT THESE SERVICES ARE ARRANGED INCLUDING LIAISON WITH THE RELEVANT AGENCY PRIOR TO COMMENCING CONSTRUCTION.

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**CRE CONSULTING ENGINEERS PTY LTD**  
704 Mount Alexander Road, Mooree Ponds, Vic, 3009  
Phone: 0417 318 506  
Email: admin@creconsulting.com.au

DESIGNED: CRE DATE: 20/01/23  
CHECKED: DATE:  
SURVEYED: MOONLAND DATE: DEC 2022  
SURVEY DATUM: A.M.D. & MGA84  
SCALES: AS SHOWN

CLIENT: Merri-bek City Council

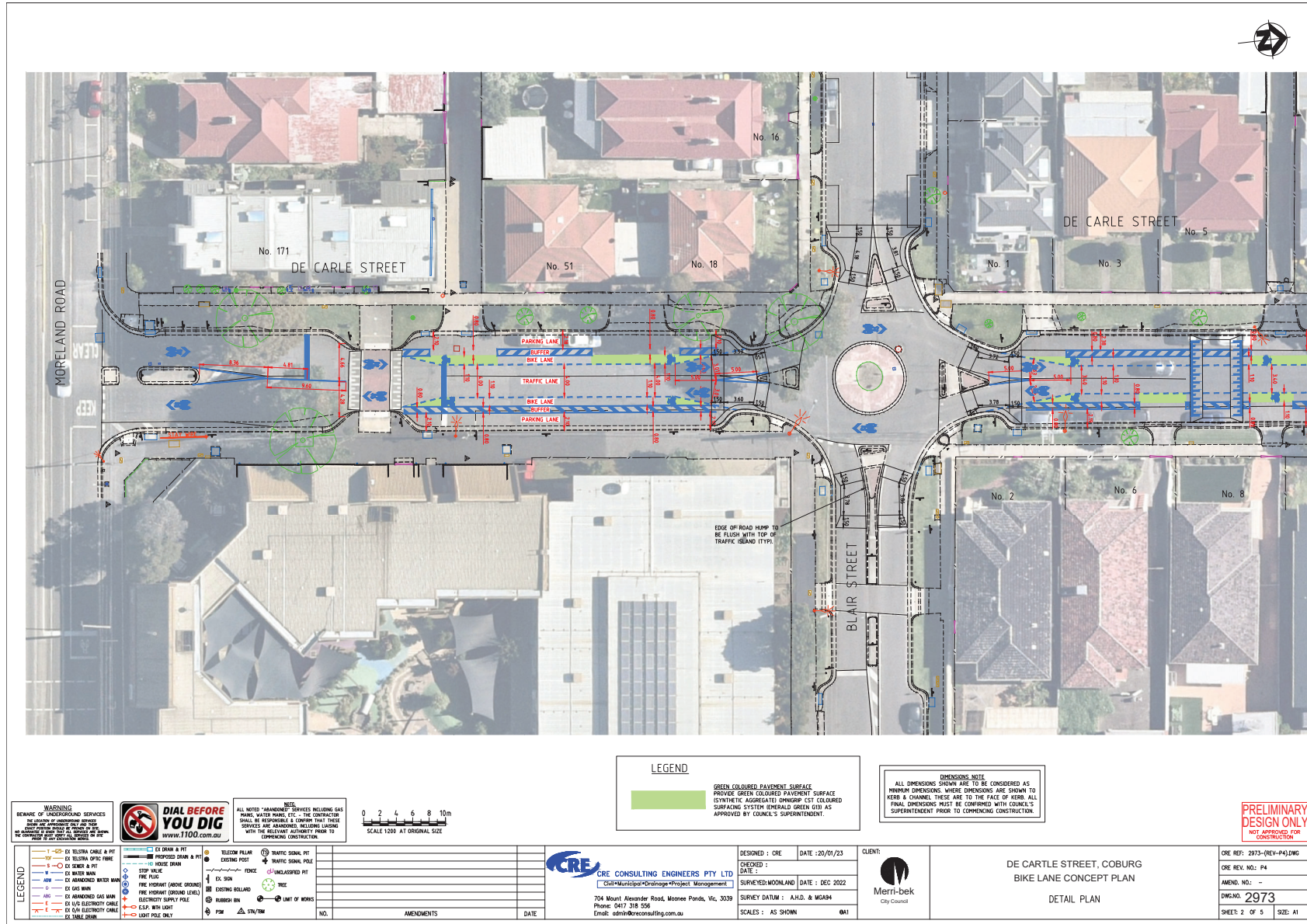
DE CARLE STREET, COBURG  
BIKE LANE CONCEPT PLAN

FACE SHEET

CRE REF: 2973-(REV-P4)DWG  
CRE REV. NO.: P4  
AMEND. NO.: -  
DWG NO: 2973  
SHEET: 1 OF 5 SIZE: A1

PRELIMINARY DESIGN ONLY NOT APPROVED FOR CONSTRUCTION





**LEGEND**

GREEN COLOURED PAVEMENT SURFACE  
 PROVIDE GREEN COLOURED PAVEMENT SURFACE  
 (SYNTHETIC AGGREGATED GRANULAR G37 COLOURED  
 SURFACING SYSTEM GENERAL GREEN 039 AS  
 APPROVED BY COUNCIL'S SUPERINTENDENT.

**DIMENSIONS NOTE**

ALL DIMENSIONS SHOWN ARE TO BE CONSIDERED AS  
 MINIMUM DIMENSIONS. WHERE DIMENSIONS ARE SHOWN TO  
 KERB & CHANNEL THESE ARE TO THE FACE OF KERB. ALL  
 FINAL DIMENSIONS MUST BE CONFIRMED WITH COUNCIL'S  
 SUPERINTENDENT PRIOR TO COMMENCING CONSTRUCTION.

**WARNING**  
 BEWARE OF UNDERGROUND SERVICES  
 THE SHOWING OF UNDERGROUND SERVICES  
 IS FOR INFORMATION ONLY. ALL WORK  
 MUST BE APPROVED BY THE RELEVANT  
 AUTHORITY PRIOR TO COMMENCING  
 CONSTRUCTION. SEE THE RELEVANT  
 AUTHORITY FOR THE LOCATION OF ALL  
 SERVICES TO BE EXCAVATED OR  
 DELETED BY THE RELEVANT AUTHORITY.



**NOTE**  
 ALL NOTES "AS SHOWN" SERVICES INCLUDING GAS  
 MAINS, WATER MAINS, ETC. - THE CONTRACTOR  
 SHALL BE RESPONSIBLE TO VERIFY THAT THESE  
 SERVICES ARE ABANDONED, INCLUDING LAMING  
 WITH THE RELEVANT AUTHORITY PRIOR TO  
 COMMENCING CONSTRUCTION.



LEGEND	DESCRIPTION	NO.	AMENDMENTS	DATE
[Symbol]	EX TELSTRA CABLE & PIT			
[Symbol]	EX TELSTRA OPTIC FIBRE			
[Symbol]	EX SEWER & PIT			
[Symbol]	EX WATER MAIN			
[Symbol]	EX ABANDONED WATER MAIN			
[Symbol]	EX GAS MAIN			
[Symbol]	EX ABANDONED GAS MAIN			
[Symbol]	EX GAS ELECTRICITY CABLE			
[Symbol]	EX GAS ELECTRICITY CABLE & TABLE DRAIN			
[Symbol]	EX DRAIN & PIT			
[Symbol]	EX PROPOSED DRAIN & PIT			
[Symbol]	HOUSE DRAIN			
[Symbol]	STOP SIGN			
[Symbol]	EX HOVWAY (GRADE CHANGING)			
[Symbol]	EX HOVWAY (GROUND LEVEL)			
[Symbol]	ELECTRICITY SUPPLY POLE			
[Symbol]	CLAY BURN LIGHT			
[Symbol]	LIGHT POLE ONLY			
[Symbol]	EX TELECOM PILLAR			
[Symbol]	EX TRAFFIC SIGNAL PIT			
[Symbol]	EX TRAFFIC SIGNAL POLE			
[Symbol]	EXISTING POST			
[Symbol]	EXISTING FENCE			
[Symbol]	EX SIGN			
[Symbol]	EXISTING BOLLARD			
[Symbol]	RUBBER BIN			
[Symbol]	PSM			
[Symbol]	570/70M			
[Symbol]	TRAFFIC SIGNAL PIT			
[Symbol]	TRAFFIC SIGNAL POLE			
[Symbol]	INCLINED PIT			
[Symbol]	TRUCK			
[Symbol]	UNIT OF WORKS			

**CRE CONSULTING ENGINEERS PTY LTD**  
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 704 Mount Alexander Road, Moonee Ponds, Vic, 3039  
 Phone: 0417 318 504  
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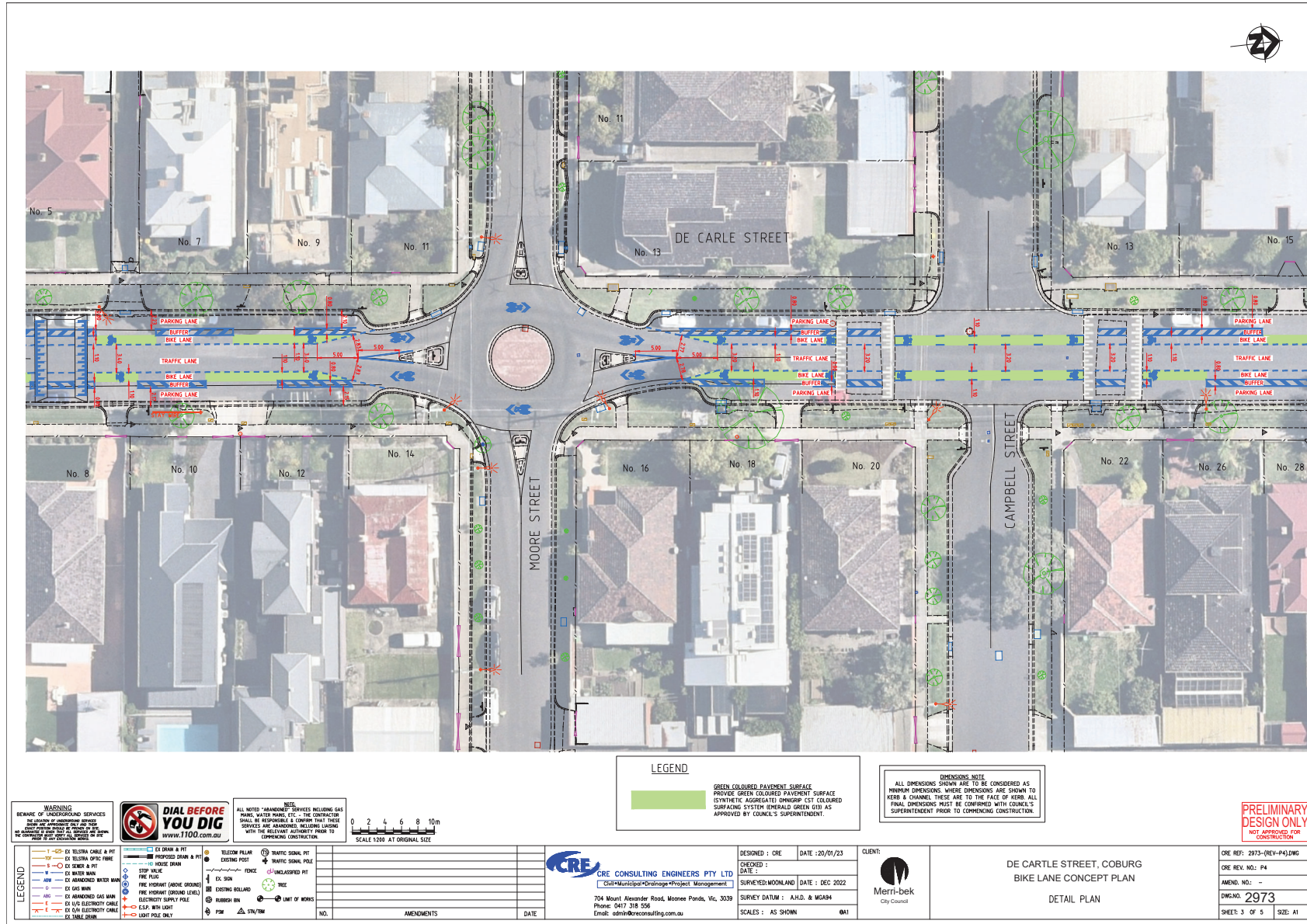
DESIGNED : CRE DATE : 20/01/23  
 CHECKED : MOONLAND DATE :  
 SURVEYED:MOONLAND DATE : DEC 2022  
 SURVEY DATUM : A.M.D. & MGA84  
 SCALES : AS SHOWN

CLIENT:  
  
 Merri-bek  
 City Council

DE CARLE STREET, COBURG  
 BIKE LANE CONCEPT PLAN  
 DETAIL PLAN

CRE REF: 2973-(REV-PA).DWG  
 CRE REV. NO.: P4  
 AMEND. NO.: -  
 DWG. NO. 2973  
 SHEET: 2 OF 5 SIZE: A1

**PRELIMINARY DESIGN ONLY**  
 NOT APPROVED FOR CONSTRUCTION



**LEGEND**

GREEN COLOURED PAVEMENT SURFACE  
 PROVIDE GREEN COLOURED PAVEMENT SURFACE  
 (SYNTHETIC AGGREGATE OVERWIP EST COLOURED SURFACING SYSTEM GENERAL GREEN COB AS APPROVED BY COUNCIL'S SUPERINTENDENT.

**DIMENSIONS NOTE**  
 ALL DIMENSIONS SHOWN ARE TO BE CONSIDERED AS MINIMUM DIMENSIONS. WHERE DIMENSIONS ARE SHOWN TO KERB & CHANNEL THESE ARE TO THE FACE OF KERB. ALL FINAL DIMENSIONS MUST BE CONFIRMED WITH COUNCIL'S SUPERINTENDENT PRIOR TO COMMENCING CONSTRUCTION.

**WARNING**  
 BEWARE OF UNDERGROUND SERVICES  
 THE SHOWING OF UNDERGROUND SERVICES IS FOR INFORMATION ONLY. ALL SERVICES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE RELEVANT AUTHORITY PRIOR TO COMMENCING CONSTRUCTION.

**DIAL BEFORE YOU DIG**  
 www.1100.com.au

**NOTE**  
 ALL NOTES "AS SHOWN" SERVICES INCLUDING GAS, WATER, FIBRE OPTIC, ETC. - THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS FROM THE RELEVANT AUTHORITY PRIOR TO COMMENCING CONSTRUCTION.

SCALE 1:200 AT ORIGINAL SIZE

EX TELSTRA CABLE & PIT	EX DRAIN & PIT	TELECOM PILLAR	TRAFFIC SIGNAL PIT
EX TELSTRA OPTIC FIBRE	PROPOSED DRAIN & PIT	EXISTING FOOT	TRAFFIC SIGNAL PIT
EX SIBER & PIT	HOUSE DRAIN	EXISTING FENCE	EXISTING PIT
EX SIBER MAN	STOP SIGN	EX SIGN	EXISTING PIT
EX ABANDONED WATER MAIN	FIRE HYDRANT (BASE GRADING)	EXISTING ROLLBAR	EXISTING PIT
EX GAS MAIN	FIRE HYDRANT (GROUND LEVEL)	EXISTING BIN	UNIT OF WORKS
EX ABANDONED GAS MAIN	ELECTRICITY SUPPLY POLE	PSM	57M/70M
EX GAS ELECTRICITY CABLE	CLAY BIN LIGHT	UNIT OF WORKS	
EX GAS ELECTRICITY CABLE	TABLE DRAIN		
	LIGHT POLE ONLY		

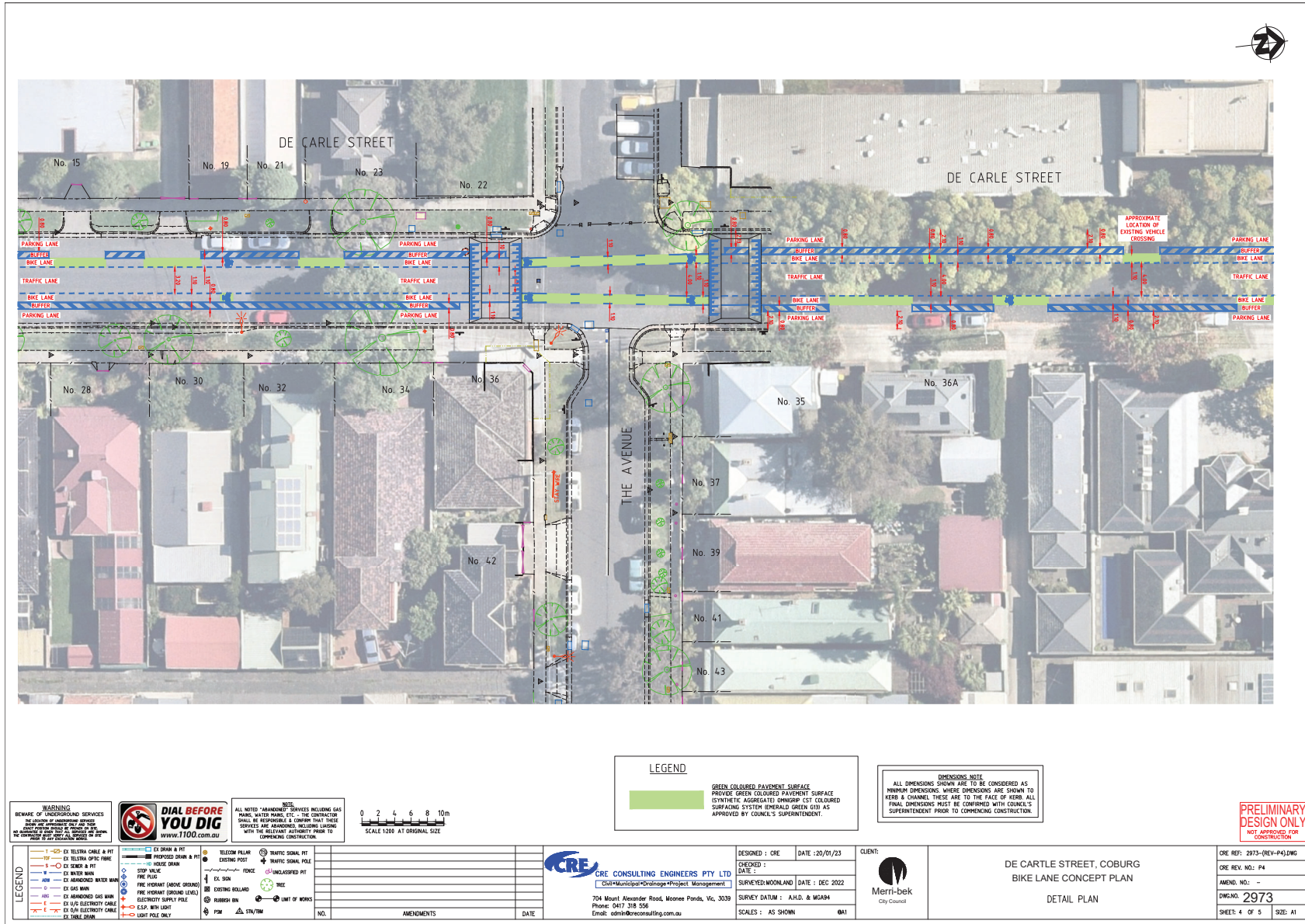
**CRE CONSULTING ENGINEERS PTY LTD**  
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 704 Mount Alexander Road, Moonee Ponds, Vic, 3009  
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DESIGNED: CRE DATE: 20/01/23  
 CHECKED: DATE:  
 SURVEYED: MOONLAND DATE: DEC 2022  
 SURVEY DATUM: A.M.D. & MGA94  
 SCALES: AS SHOWN

CLIENT: Merri-bek City Council  
 DE CARLE STREET, COBURG  
 BIKE LANE CONCEPT PLAN  
 DETAIL PLAN

**PRELIMINARY DESIGN ONLY**  
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CRE REF: 2073-(REV-P4).DWG  
 CRE REV. NO.: P4  
 AMEND. NO.: -  
 DWGNO: 2973  
 SHEET: 3 OF 5 SIZE: A1



**LEGEND**

GREEN COLOURED PAVEMENT SURFACE  
 PROVIDE GREEN COLOURED PAVEMENT SURFACE  
 (SYNTHETIC AGGREGATED DIMMABLE CST COLOURED SURFACING SYSTEM GENERAL GREEN C10 AS APPROVED BY COUNCIL'S SUPERINTENDENT.

**DIMENSIONS NOTE**  
 ALL DIMENSIONS SHOWN ARE TO BE CONSIDERED AS MINIMUM DIMENSIONS, WHERE DIMENSIONS ARE SHOWN TO KERB & CHANNEL THESE ARE TO THE FACE OF KERB. ALL FINAL DIMENSIONS MUST BE CONFIRMED WITH COUNCIL'S SUPERINTENDENT PRIOR TO COMMENCING CONSTRUCTION.

**WARNING**  
 BEWARE OF UNDERGROUND SERVICES  
 THE SHOWING OF UNDERGROUND SERVICES IS FOR INFORMATION ONLY. ALL SERVICES ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL SERVICES PRIOR TO ANY EXCAVATION WORK.

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**NOTE**  
 ALL NOTED "ABANDONED" SERVICES INCLUDING GAS, WATER, FIBRE, ETC. - THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT THESE SERVICES ARE ABANDONED, INCLUDING LIAISON WITH THE RELEVANT AUTHORITY PRIOR TO COMMENCING CONSTRUCTION.

—	EX TELSTRA CABLE & PIT	—	EX DRAIN & PIT
—	EX TELSTRA OPTIC FIBRE	—	PROPOSED DRAIN & PIT
—	EX SEWER & PIT	—	HOUSE DRAIN
—	EX WATER MAIN	—	STOP VALVE
—	EX ABANDONED WATER MAIN	—	EX SIGN
—	EX GAS MAIN	—	EXISTING BOLLARD
—	EX ABANDONED GAS MAIN	—	EX LIGHT
—	EX LV ELECTRICITY CABLE	—	ELECTRICITY SUPPLY POLE
—	EX MV ELECTRICITY CABLE	—	CLAMP BIN LIGHT
—	EX TABLE DRAIN	—	LIGHT POLE ONLY
—	EX TELECOM PILE	—	EX SIGNAL PIT
—	EX PROPOSED DRAIN & PIT	—	EXISTING SIGNAL POLE
—	EX HOUSE DRAIN	—	EX SIGNAL POLE
—	STOP VALVE	—	EX SIGNAL PIT
—	EX SIGN	—	EXISTING BOLLARD
—	EXISTING BOLLARD	—	EX LIGHT
—	ELECTRICITY SUPPLY POLE	—	ELECTRICITY SUPPLY POLE
—	CLAMP BIN LIGHT	—	CLAMP BIN LIGHT
—	LIGHT POLE ONLY	—	LIGHT POLE ONLY



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 SCALES: AS SHOWN

CLIENT:  
  
 Merri-bek City Council

DE CARLE STREET, COBURG  
 BIKE LANE CONCEPT PLAN  
 DETAIL PLAN

CRE REF: 2973-(REV-P4).DWG
CRE REV. NO.: P4
AMEND. NO.: -
DWG. NO. 2973
SHEET: 4 OF 5 SIZE: A1

**PRELIMINARY DESIGN ONLY**  
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