

COUNCIL AGENDA

ORDINARY COUNCIL MEETING

25 October 2023

BOOK 1



You are hereby notified that an **Ordinary Council Meeting** of Liverpool City Council will be held at the **FRANCIS GREENWAY CENTRE, 170 GEORGE STREET, LIVERPOOL** on **Wednesday, 25 October 2023** commencing at 2.00pm. Doors to the Francis Greenway Centre will open at 1.50pm.

Liverpool City Council Meetings are livestreamed onto Council's website and remain on Council's website for a period of 12 months. If you have any enquiries, please contact Council and Executive Services on 8711 7441.

A handwritten signature in black ink, appearing to read "John Ajaka".

Hon John Ajaka

CHIEF EXECUTIVE OFFICER

Statement of Ethical Obligations

Oath or Affirmation of Office

In taking the Oath or Affirmation of Office, each Councillor has made a commitment to undertake the duties of the office of councillor in the best interests of the people of Liverpool and Liverpool City Council and that they will faithfully and impartially carry out the functions, powers, authorities and discretions vested in them under the Local Government Act 1993 or any other Act to the best of their ability and judgment.

Conflicts of Interest

A councillor who has a conflict of interest in any matter with which the council is concerned, and who is present at a meeting of the council when the matter is being considered, must disclose the interest and the nature of the interest to the meeting as soon as practicable. Both the disclosure and the nature of the interest must be recorded in the minutes of the Council meeting where the conflict of interest arises. Councillors should ensure that they are familiar with Parts 4 and 5 of the Code of Conduct in relation to their obligations to declare and manage conflicts of interests.

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Presentations by Councillors

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NIL

Council in Closed Session

The following items are listed for consideration by Council in Closed Session with the public excluded, in accordance with the provisions of the Local Government Act 1993 as listed below:

CONF 01	Liverpool Community Safety & Crime Prevention Advisory Committee Member Nominations 2023 and amendments to the Liverpool Community Safety & Crime Prevention Advisory Committee Charter
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Reason: Item CONF 01 is confidential pursuant to the provisions of s10A(2)(a) of the Local Government Act because it contains personal matters concerning particular individuals (other than councillors).

ORDER OF BUSINESS

CONF 02 Acquisition of Lot 15 in DP 1254457, Lot 15 Monoplane Avenue, Middleton Grange

Reason: Item CONF 02 is confidential pursuant to the provisions of s10A(2)(c) of the Local Government Act because it contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business.

CONF 03 Schedule of Contracts - Financial Year 2023 - 2024

Reason: Item CONF 03 is confidential pursuant to the provisions of s10A(2)(d i) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it.

CONF 04 Purchase of Lot 100 in Plan of Acquisition DP 1284142 (Part Lot D DP 105925), 184 Fifth Avenue, Austral for local drainage

Reason: Item CONF 04 is confidential pursuant to the provisions of s10A(2)(c) of the Local Government Act because it contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business.

CONF 05 Hammondville Park Leisure Precinct Masterplan and Plan of Management

Reason: Item CONF 05 is confidential pursuant to the provisions of s10A(2)(d i) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it.

CONF 06 Michael Wenden Aquatic Centre - Development of Design Concepts

Item CONF 06 is confidential pursuant to the provisions of s10A(2)(d i) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it.

Close



MINUTES OF THE ORDINARY MEETING HELD ON 27 SEPTEMBER 2023

PRESENT:

Mayor Ned Mannoun
 Councillor Ammoun
 Councillor Goodman
 Councillor Green
 Councillor Hadid
 Councillor Hagarty (Online)
 Councillor Harle
 Councillor Kaliyanda
 Councillor Karnib (Online)
 Councillor Macnaught
 Councillor Rhodes
 Hon John Ajaka, Chief Executive Officer
 Mr Farooq Portelli, Director Corporate Support
 Ms Tina Bono, Director Community & Lifestyle
 Ms Lina Kakish, Director Planning & Compliance
 Ms Julie Scott, Acting Director City Futures
 Mr Jason Breton, Director Operations
 Mr David Galpin, General Counsel, Manager Governance, Legal and Procurement
 Mr Vishwa Nadan, Chief Financial Officer
 Mr John Lac, Manager Project Delivery
 Ms Jessica Saliba, Acting Manager Council and Executive Services
 Ms Susan Ranieri, Council and Executive Services Coordinator
 Ms Melissa Wray, Council and Executive Services Officer (minutes)

The meeting commenced at 2.01pm.

STATEMENT REGARDING WEBCASTING OF MEETING

The Mayor reminded everyone that in accordance with Council's Code of Meeting Practice (other than the Public Forum Section), the meeting is being livestreamed.

**ACKNOWLEDGMENT OF COUNTRY,
PRAYER OF COUNCIL AND
AFFIRMATION**

The prayer of the Council was read by Pastor Steve Riethmuller from Cartwright Gospel Chapel.

NATIONAL ANTHEM

The National Anthem was played at the meeting.

COUNCILLORS ATTENDING REMOTELY

Clr Karnib and Clr Hagarty requested permission to attend the meeting via MS Teams.

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Macnaught**

That Clr Karnib and Clr Hagarty be granted permission to attend the meeting via MS Teams.

On being put to the meeting the motion was declared CARRIED.

APOLOGIES

Nil.

CONDOLENCES

Nil.

CONFIRMATION OF MINUTES

Motion: **Moved: Clr Rhodes** **Seconded: Deputy Mayor Hadid**

That the minutes of the Ordinary Meeting held on 30 August 2023 be confirmed as a true record of that meeting.

On being put to the meeting the motion was declared CARRIED.

DECLARATIONS OF INTEREST

Councillor Kaliyanda declared a non-pecuniary interest, but less than significant in the following item:

Item: COM 02 – Grants Donations and Community Sponsorship Report

Reason: Councillor Kaliyanda has an association with one of the organisations,

Councillor Kaliyanda remained in the chamber.

Councillor Macnaught declared a non-pecuniary interest, but less than significant in the following item:

Item: CONF 02 – Order of Liverpool Awards 2023

Reason: Councillor Macnaught has an association with members listed in the report.

Councillor Macnaught remained in the chamber.

Councillor Hagarty declared a non-pecuniary interest, but less than significant in the following items:

Item: COM 02 – Grants Donations and Community Sponsorship Report

Reason: Councillor Hagarty has an association with one of the organisations.

Item: CONF 02 – Order of Liverpool Awards 2023

Reason: Councillor Hagarty has an association with members listed in the report.

Councillor Hagarty remained online.

Councillor Rhodes declared a non-pecuniary interest, but less than significant in the following item:

Item: MOU 01 – Logistical support for the ‘Battle of Beersheba Memorial Service’

Councillor Rhodes left the chamber during this item.

ITEM NO: CORP 01
FILE NO: 299607.2023
SUBJECT: Election of Deputy Mayor

MOTION TO BRING ITEM FORWARD

Motion **Moved: Mayor Mannoun** **Seconded: Cllr Ammoun**

That Council bring the item CORP 01 forward.

On being put to the meeting the motion was declared CARRIED.

COUNCIL DECISION

Motion: **Moved: Cllr Rhodes** **Seconded: Cllr Ammoun**

That Council:

1. Determines the method of open voting to be used for the election of Deputy Mayor;
and
2. Once determined, the returning officer to conduct the election of the Deputy Mayor
for the period of 27 September 2023 – September 2024.

On being put to the meeting the motion was declared CARRIED.

Nominations

Nominations were called for the position of Deputy Mayor by the Chief Executive Officer as the Returning Officer.

The Returning Officer advised that two nominations had been received, being for Cllr Macnaught and Cllr Green.

The following votes were recorded:

Councillor	Clr Macnaught	Clr Green
Mayor Mannoun	*	
Clr Ammoun	*	
Clr Goodman	*	
Clr Green		*
Clr Hadid	*	
Clr Hagarty		*
Clr Harle		*
Clr Kaliyanda		*
Clr Karnib		*
Clr Macnaught	*	
Clr Rhodes	*	

Clr Macnaught was declared the Deputy Mayor for the term 28 September 2023 – September 2024.

All ballot papers be collected and destroyed by the returning officer.

Mayor Mannoun thanked the outgoing Deputy Mayor, Clr Hadid for his service to the role.

MAYORAL MINUTES

ITEM NO: MAYOR 01
SUBJECT: Congratulating Skinny Hussein on his induction into the Australia Boxing Hall of Fame
REPORT: Mayor Ned Mannoun
DATE: 27 September 2023

I am excited to congratulate Liverpool's very own Nedal "Skinny" Hussein on his recent induction into the Australia Boxing Hall of Fame. Skinny's illustrious career was filled with unforgettable moments in the ring.

His versatility and skill saw him secure numerous Australian, Asia Pacific and World titles in multiple weight divisions. Famously, Skinny was cheated of a victory over the legendary Manny Pacquiao, with the referee of that controversial bout recently coming out and admitting to his corrupt behaviour.

Nedal "Skinny" Hussein's journey in boxing serves as an inspiration to all aspiring athletes in our nation. Since retiring as a fighter, Skinny has given back to the sport and back to the community by running his gym - the 'Body Punch Boxing Gym' in Prestons.

His dedication to the sport, exceptional skill, and sportsmanship have earned him a well-deserved place in the Australia Boxing Hall of Fame.

On behalf of Liverpool City Council, I extend our heartfelt congratulations to Nedal "Skinny" Hussein for this prestigious accolade. May his legacy continue to inspire future generations of boxers, and may he enjoy continued success in all his endeavours.

RECOMMENDATION:

That Council:

1. Congratulates Nedal "Skinny" Hussein on his recent induction into the Australia Boxing Hall of Fame.
2. Recognises his enduring contribution to the community of Liverpool as a respected role model and boxing coach through his work at 'Body Punch Boxing Gym' in Prestons.

COUNCIL DECISION

Motion: **Moved: Mayor Mannoun**

That Council:

1. Congratulates Nedal "Skinny" Hussein on his recent induction into the Australia Boxing Hall of Fame.

2. Recognises his enduring contribution to the community of Liverpool as a respected role model and boxing coach through his work at 'Body Punch Boxing Gym' in Prestons
3. Forward Nedal "Skinny" Hussein as a nomination for the sporting category candidate for the Australia Day Awards.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: MAYOR 02
SUBJECT: Congratulating Moemoana Safa'ato'a Schwenke and Recognising Matavai
 Liverpool's Pacific Cultural Arts Centre
REPORT: Mayor Ned Mannoun
DATE: 27 September 2023

Congratulations Moemoana Safa'ato'a Schwenke, on being crowned Miss Samoa 2023 – 2024. Moemoana's Miss Samoa title comes some 26 years after her mother, the brilliant Maryjane, won the same crown.

Many of us know Maryjane through her work at Matavai - Liverpool's Pacific Cultural Arts Centre. Matavai Liverpool's Pacific Cultural Arts Centre at Lurnea Community Hall has been instrumental in nurturing and promoting the cultural heritage of our Samoan community.

The centre has become the beating heart of Samoan culture in Australia, a legacy that we fought tirelessly to establish in Liverpool.

I wish to extend my heartfelt gratitude to everyone involved in providing a home for Matavai Liverpool's Pacific Cultural Arts Centre. Your support has enabled the Samoan community to thrive and strengthen our identity as Australia's multicultural capital.

Finally, on behalf of Liverpool City Council, I would like to wish Moemoana all the very best as she goes on to participate in the 'Miss Pacific Island' Pageant.

RECOMMENDATION:

That Council:

1. Congratulates Moemoana Safa'ato'a Schwenke on being crowned Miss Samoa 2023 – 2024
2. Recognises and thanks Matavai for their contribution to Liverpool through their work at Lurnea Community Hall

COUNCIL DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Rhodes**

That Council:

1. Congratulates Moemoana Safa'ato'a Schwenke on being crowned Miss Samoa 2023 – 2024
2. Recognises and thanks Matavai for their contribution to Liverpool through their work at Lurnea Community Hall

On being put to the meeting the motion was declared CARRIED.

The symbolism of fireworks at Deepawali is tied to the very essence of what Deepawali is about. Fireworks at Deepawali signify the victory of light over darkness, of knowledge over ignorance and good over evil.

RECOMMENDATION:

1. Organises pyrotechnics and fireworks for the Ram Krishna Temple's Deepawali Mela event, to the value of \$10, 000.
2. Wishes the entire community a 'Happy Deepawali'

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Goodman**

1. Organises pyrotechnics and fireworks for the Ram Krishna Temple's Deepawali Mela event, to the value of \$10, 000.
2. Wishes the entire community a 'Happy Deepawali'

Chairperson

ITEM NO: MAYOR 04
SUBJECT: Congratulating Uncle Troy Davis on his election to Chair of the Gandangara Land Council
REPORT: Mayor Ned Mannoun
DATE: 27 September 2023

I am delighted to take this moment to extend my warmest congratulations to Uncle Troy Davis on his appointment as Chair of the Gandangara Land Council. This significant milestone is not only a testament to Uncle Troy's dedication and leadership but also a moment of pride for our community.

Uncle Tony Scholes has served our community with dedication and passion during his tenure as Chair of the Gandangara Land Council. His commitment to the preservation of our indigenous heritage has been truly remarkable, and his leadership will be fondly remembered.

As we welcome Uncle Troy Davis to this pivotal role, I would also like to express our heartfelt appreciation to Uncle Tony Scholes for his outstanding contributions. His leadership has paved the way for progress, and his dedication has left an indelible mark on our community.

I look forward to working closely with Uncle Troy and the Gandangara Land Council as we embark on a shared journey to co-create a better Liverpool for all residents. It is through collaboration and understanding that we can make meaningful progress towards a more inclusive, sustainable, and harmonious future.

I wish Uncle Troy Davis all the best in his new position as Chair of the Gandangara Land Council and extend our sincere thanks to Uncle Tony Scholes for his unwavering commitment and leadership.

RECOMMENDATION:

That Council:

1. Congratulates Uncle Troy on his new position as Chair of the Gandangara Land Council and extends our sincere thanks to Uncle Tony Scholes for his unwavering commitment to the Indigenous community and leadership.

Motion: **Moved: Clr Rhodes** **Seconded: Clr Macnaught**

1. Receive and note this report;
2. Supports in principle the proposed amendment to Part 3.7 Residential Flat Buildings (Outside Liverpool City Centre) and Part 4 (Development in Liverpool City Centre) of the Liverpool Development Control Plan 2008;
3. Delegates authority to the CEO (or delegate) to make minor or topographical changes to the DCP prior to public exhibition;
4. Undertake Public Exhibition of the draft DCP Amendment, for 28 days in accordance with the Liverpool Community Participation Plan;
5. As part of the community consultation period, present the draft Liverpool Part 3.7 amended Development Control Plan to the Design Excellence Panel (DEP), in accordance with clause 15 of *Environmental Planning and Assessment Regulations 2021*.
6. Receives a further report detailing the outcomes of the Design Excellence Panel and outcome of the public exhibition period including any submissions received.

Councillors voted unanimously for this motion.

Motion: **Moved: Clr Rhodes** **Seconded: Clr Harle**

1. Endorse in principle the Draft Conservation Zones Study;
2. Prepare a draft Planning Proposal to amend the *Liverpool Local Environmental Plan 2008* in accordance with the zoning recommendations in the draft Conservation Zones Study;
3. Undertake an initial public exhibition of the Planning Proposal, in accordance with the Liverpool Community Participation Plan;
4. Present the draft Planning Proposal and supporting draft Conservation Zones Study to the Liverpool Local Planning Panel for advice;
5. Receive a further report on the draft Planning Proposal and the draft Conservation Zones Study, including the outcomes of the early public exhibition period and the Liverpool Local Planning Panel.

On being put to the meeting the motion was declared CARRIED.

Motion: **Moved: Clr Green** **Seconded: Clr Harle**

1. Supports the military theme names including Amiens Road, Caesar Boulevard, Compass Concourse, Horrie Road, Jericho Road, Jezzine Lane, Juno Drive, Justin Road, Lone Pine Lane, Milo Avenue, Nassau Lane, Nell Street, Opossum Street, Pedro Crescent, Pilckem Path, Polygon Lane, Prince Loop, Rafa Walk, Rank Road, Roosevelt Crescent, Saidor Street, Samakh Street, Sandy Way, Sarbi Circuit, Semut Street, Shaggy Ridge, Sharon Walk, Tex Crescent, and Tulkarm Street
2. Forwards the names to the Geographical Names Board, seeking formal approval;
3. Publicly exhibits the names in accordance with Council's Naming Convention Policy, for a period of 28 days, following formal approval from the GNB; and
4. Authorises the Chief Executive Officer to undertake the process of gazettal, if there are no objections received during public exhibition.

Chairperson

ITEM NO: PLAN 06
FILE NO: 303967.2023
SUBJECT: Street Naming - Middleton Grange

COUNCIL DECISION

Motion: **Moved: Cllr Green** **Seconded: Cllr Harle**

That Council:

1. Notes the assessment of the endorsed street names being Ansett, Rex, Bonza, Jetstar, Bird- Walton, Pilot and Wirraway Street
2. Supports the alternate list of six additional street names being Jetstream Avenue, Nacelle Street, Pilot Street, Radome Street, Skyport Street and Wirraway Street to be used in the forthcoming future town centre and subdivisions nearing completion that have varied the current ILP of the suburb.
3. Forwards the names to the Geographical Names Board, seeking formal approval;
4. Publicly exhibits the names in accordance with Council's Naming Convention Policy, for a period of 28 days, following formal approval from the GNB; and
5. Authorises the Chief Executive Officer to undertake the process of gazettal, if there are no objections received during public exhibition.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: PLAN 07
FILE NO: 304160.2023
SUBJECT: Provisions for Electric Vehicle Infrastructure in Development Control Plans - Financial Implications Report

COUNCIL DECISION

Motion: **Moved: Cllr Macnaught** **Seconded: Cllr Kaliyanda**

That Council:

1. Receives and notes the financial implications including installation and operational cost associated with EV infrastructure in new dwellings;
2. Endorses the draft amendments of the Liverpool Development Control Plan 2008, Liverpool Growth Centre Precinct Development Control Plan, and Edmondson Park South Development Control Plan 2012 to include controls for EV charging stations as detailed in (**Attachment 1**);
3. Place the draft amendments to the Liverpool Development Control Plan 2008, Liverpool Growth Centre Precinct Development Control Plan and Edmondson Park South Development Control Plan 2012 on public exhibition for a minimum period of 28 days; and
4. Delegates to the CEO the finalisation of the draft Development Control Plans should no objections be received; or receive a report summarising the details of the submissions upon conclusion of the exhibition period.

On being put to the meeting the motion was declared CARRIED.

COMMUNITY & LIFESTYLE REPORTS

ITEM NO: COM 01
FILE NO: 288913.2023
SUBJECT: Report on Most Blessed Nights 2023

COUNCIL DECISION

Motion: **Moved:** Clr Ammoun **Seconded:** Clr Rhodes

That Council:

1. Receives and notes the report.
2. Adopts for Most Blessed Nights 2024 to expand onto Macquarie Street.
3. Approves \$100,000 towards the expansion of the event in the next quarterly review.
4. Congratulates the events team on the successful event.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: COM 02
FILE NO: 297917.2023
SUBJECT: Grants Donations and Community Sponsorship Report

COUNCIL DECISION

Motion: **Moved: Cllr Green** **Seconded: Cllr Rhodes**

That Council:

1. Endorses the funding recommendation of **\$10,000** (GST exclusive) under the **Community Grants Program** for the following project:

Applicant	Project	Recommended
Western Sydney Migrant Resource Centre	Liverpool Education and Employment Expo	\$5000
Global Women	Breast Cancer Awareness Program	\$4000

2. Endorses the funding recommendation of **\$16,000** (GST exclusive) under the **Community Sponsorship Program** for the following projects:

Applicant	Project	Recommended
Multicultural Association of Asia & Pacific Incorporated	Fiji Day Australia Festival	\$10,000
Delta TV	Music Festival	\$6000

On being put to the meeting the motion was declared CARRIED.

CORPORATE SUPPORT REPORTS

ITEM NO: CORP 02

FILE NO: 299731.2023

SUBJECT: TfNSW proposed Construction Lease over Council land being part of Lot 5000 DP 855173 off Albemarle Place, Cecil Hills

COUNCIL DECISION

Motion:

Moved: Clr Kaliyanda

Seconded: Clr Rhodes

That Council:

1. Resolves that it has no objection to TfNSW compulsorily acquiring a construction lease, for a period of 4 years, over Part Lot 5000 DP 855173, situated off Albemarle Place, Cecil Hills and having an area of 820 square metres, for compensation payable to Council as outlined in this report.
2. Authorises its delegated officer to execute any document, under Power of Attorney, necessary to give effect to this decision.
3. Requests that every one tree taken out will be replaced with two trees in the same location and that TfNSW will comply with tree management regulations and climate action plan of council.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: CORP 03
FILE NO: 303281.2023
SUBJECT: Investment Report August 2023

COUNCIL DECISION

Motion: **Moved: Cllr Harle** **Seconded: Cllr Rhodes**

That Council receive and note this report.

On being put to the meeting the motion was declared CARRIED.

OPERATIONS REPORTS

ITEM NO: OPER 01
FILE NO: 301942.2023
SUBJECT: Managing Drainage Channels and Waterways

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Macnaught**

That Item OPER 01 to be dealt later in the meeting.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: OPER 02
FILE NO: 306650.2023
SUBJECT: 29 March 2023 OPER 01 City Presentation Parks Review - September update

COUNCIL DECISION

Motion: **Moved: Cllr Rhodes** **Seconded: Cllr Macnaught**

That Council acknowledge the provided updates from April 2023 Council Meeting.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: OPER 03
FILE NO: 312427.2023
SUBJECT: McGirr Park Playground

COUNCIL DECISION

Motion: **Moved:** **Clr Macnaught** **Seconded:** **Clr Rhodes**

That Council resolves to immediately allocate \$600k in S7.11 Developer Contribution funding to the McGirr Park Playground Project to serve as Council's Co-contribution for the DPE Green Space Program and proceed with project delivery. In addition, seek approval through the Club Grants Program for the reallocation of \$300k grant funding, originally slated for Ron Darcy Oval, to the McGirr Park Playground project.

On being put to the meeting the motion was declared CARRIED.

COMMITTEE REPORTS

ITEM NO: CTTE 01

FILE NO: 302405.2023

SUBJECT: Minutes of the Tourism and CBD Committee 29 August 2023

COUNCIL DECISION

Motion: **Moved:** Cllr Rhodes **Seconded:** Cllr Macnaught

That Council:

1. Receives and notes the Minutes of the Tourism and CBD Committee Meeting held on 29 August 2023.
2. Endorse the recommendations in the Minutes.

On being put to the meeting the motion was declared CARRIED.

1. Receives and notes the Minutes of the Intermodal Committee Meeting held on 7 August 2023.
2. Endorse the recommendations in the Minutes.

Motion: **Moved: Clr Macnaught** **Seconded: Clr Rhodes**

1. Receives and notes the Minutes of the Intermodal Committee Meeting held on 7 August 2023 subject to the following amendments:

Ellie Roberson
Erik Rakowski
Dianne Wills
Carlo Di Giulio

2. Endorse the recommendations in the Minutes.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: CTTE 03
FILE NO: 312784.2023
SUBJECT: Minutes of the Civic Advisory Committee meeting held on 17 August 2023

COUNCIL DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Rhodes**

That Council move CTTE 03 into closed session.

On being put to the meeting the motion was declared CARRIED.

This item was dealt with at the end of the meeting.

ITEM NO: CTTE 04
FILE NO: 313379.2023
SUBJECT: Minutes of the Environment Advisory Committee Meeting held on 19 June 2023

COUNCIL DECISION

Motion: **Moved: Cllr Rhodes** **Seconded: Cllr Green**

That Council:

1. receives and notes the Minutes of the Environment Advisory Committee Meeting held on 19 June 2023.
2. amend the Charter to extend the duration of the meetings from two (2) hours to three (3) hours.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: CTTE 05
FILE NO: 301679.2023
SUBJECT: Minutes of the Liverpool Heritage Advisory Committee

COUNCIL DECISION

Motion: **Moved: Cllr Rhodes** **Seconded: Cllr Ammoun**

That Council defer this item to the Governance Committee Meeting.

On being put to the meeting the motion was declared CARRIED.

ITEM NO: CTTE 06
FILE NO: 314578.2023
SUBJECT: Minutes of Community Safety & Crime Prevention Advisory Committee held on 7 September 2023

COUNCIL DECISION

Motion: **Moved: Cllr Macnaught** **Seconded: Cllr Ammoun**

That Council:

1. Receives and notes the Minutes of the Community Safety and Crime Prevention Advisory Committee Meeting Thursday 7 September 2023.
2. Endorse the recommendations in the Minutes.

On being put to the meeting the motion was declared CARRIED.

RECESS

Mayor Mannoun called a recess at 3.05pm.

RESUMPTION OF MEETING

Mayor Mannoun resumed the meeting at 3.20pm with all councillors present.

QUESTIONS WITH NOTICE

Due to technical issues QWN 02 was dealt with now.

ITEM NO: QWN 02

FILE NO: 313930.2023

SUBJECT: Question with Notice - Cllr Kaliyanda - Lot 633 DP 1245754 Edmondson Park

QUESTION WITH NOTICE

Lot 633 DP 1245754 in Edmondson Park has been set aside as recreational open park space by the developer and will be soon handed over to Council.

The primary issue is resident access to the open space in particular pedestrian access with a walkway required which has not been formalised and, according to prior correspondence from Liverpool Council, requires a DA for construction of it.

The primary concern for residents living in close proximity and walking distance from the park is if the walkway is not included to facilitate pedestrian access the only access will be by car which will require a round trip.

Please address the following:

1. the status of the proposed open space Lot 633 DP 1245754 and
2. if a DA is required for the construction of the needed walkway
3. the time frame expected the parkland to be handed over to Council for public use.

Response

It is advised that Lot 633 DP 1245754 was previously rezoned to R1 residential, on the basis that Council had acquired additional land on the south western portion of the Basin 14 (Edmondson Park) site, to provide for additional open space to accommodate a playground and leash free dog area.

Lot 633 DP 1245754 is currently being utilised by the developer Okinawa Pty Ltd as a temporary detention basin, until Basin 14 is constructed, which will allow the developer to connect to the drainage to Basin 14 and allow residential development of the land. There is provision in the DCP for a walkway to be provided through Lot 633 DP 1245754 to connect

to the Basin 14 and associated open space area. This walkway is unlikely to be delivered until Basin 14 has been completed by Council to allow Okinawa Pty Ltd to decommission the temporary basin and lodge a DA for the site.

Discussion has previously been held with Allam Property Group regarding Lot 633 DP 1245754 (pedestrian access walkway to Basin 14). It was advised that any action associated with Lot 633 was contingent upon Basin 14 being completed by Council, as access could not be provided until the requirement for the temporary basin was removed and the area filled for development (subject to DA consent).

It was identified that as the site of the proposed DCP (walkway) is within the temporary basin site, it was not considered practical to excise this area out, as additional consent and works would be required for any amendment to the current temporary basin site use and that Allam Property Group would seek payment of these costs by Council. At the time Allam Property Group identified that it would be seeking to prioritise progressing the preparation of a DA for the residential development of Lot 633 DP 1245754 which would include addressing the DCP requirement for the walkway as part of the DA.

This may be another 12 to 18 months, as it is also subject to a DA and decommissioning of the temporary basin and the associated civil works required by Allam Property Group to level the site for residential development and provision of the DCP walkway.

ITEM NO: QWN 01
FILE NO: 311644.2023
SUBJECT: Question with Notice - Cllr Hagarty - Parks in Austral

QUESTION WITH NOTICE

Please address the following:

1. Please specify all parcels of land which have been acquired by Council in the last 5 years in the suburbs of Austral and Leppington for the purpose of establishing local parks and open space
2. Please specify any and all local parks which are planned to be delivered and open for public use in the suburbs of Austral and Leppington in budget year 23/24
3. Please specify any and all local parks which are planned to be delivered and open for public use in the suburbs of Austral and Leppington in budget year 24/25

Response

In relation to Points 1 and 3 a report addressing the above recommendations will be presented at a future meeting.

Council is in the process of planning for specific priority recreation and open space in Austral and Leppington. Within this, Council has an active acquisition program to purchase land for key local parks for the area and begin concept designing to deliver on the new planned open space.

Council is currently prioritising planning and delivery on the following 5 sites:

- Scott Memorial Park – 160 Fifth Avenue, 1.2 hectares has been recently acquired and will be amalgamated into the existing park – A To stage masterplan (short and long term) is currently underway with a focus on site remediation and delivering an initial \$500K renewed play space by mid-2024.
- Craik Park (Crown land) – no further acquisition required – masterplan is currently underway with a focus on delivering a stage one- \$500K renewed play space by mid-2024.
- Local Park 2 – recently acquired – site will undergo remediation and removal of structures. Open Space Construction and City Works will then assess the delivery of improvements and potential for early opening.

- Local Park 22- recently acquired – site will undergo remediation and removal of structures. The site is located adjacent to Austral Public School and further discussions with School Infrastructure NSW will be scheduled in the planning of this open space given the current school development plans.
- Local Park (51&52) – site is heavily constrained for early access by drainage and vegetation, further design work on the drainage and basin layouts will be conducted.

We are in the process of active acquisition negotiations with landowners on several basins and future open space priorities.

NOTICES OF MOTION

ITEM NO: NOM 01
FILE NO: 312621.2023
SUBJECT: Narrow Road Widths

BACKGROUND

Liverpool Constituents are suffering because our residential streets are being built too narrow to adequately serve the needs of our constituents.

With our ever-increasing population, Liverpool's reliance on private car ownership is unlike inner city areas of Sydney where greater public transport infrastructure has been provided.

Council therefore needs to advocate that State Planning regulations is not a one size fits all Liverpool Constituents need private transport to be able to perform the bare necessities such as going to work, shopping and taking the kids to school.

Liverpool is not like the inner city where there is public transport infrastructure and therefore does not rely on private vehicles.

Liverpool has been neglected by State and Federal Government by their lack of public transportation infrastructure despite our population increases.

The State Government needs to fully recognise and consider Liverpool's needs are different from other Sydney areas in relation to dependency of privately owned vehicles.

The State Government's dream of the 15 minute walkable cities does not pass the reality test for our people who live in Liverpool.

Our constituents are more concerned about where are they going to park their car and will they be able to safely manoeuvre their car out of their very narrow streets despite the ever increasing number of vehicles that is a result of ever increase housing and population densities, that inevitably mean increased number of vehicles all being crammed into the same little narrow streets in Liverpool.

Streets that are too narrow for emergency vehicles to be able to access if there are cars parked on both sides of the street, should not be acceptable.

Streets that are too narrow for cars to park without parking on the verge, should not be acceptable.

The cost of housing has meant that children are staying home longer also increasing the number of vehicles in any given street.

We understand the concern about being able to afford the build and maintenance costs of residential streets, but what is the difference in building and maintaining a street that enables traffic in either direction and cars parked on both sides of the street when compared to the width of very narrow, not fit for purpose residential streets that we are currently delivering?

However equally safe and perhaps even more safe are wider residential streets built to meet the practical needs of today's residents that address safety through other commonly used traffic calming devices rather than making the streets so narrow they no longer enable access for emergency vehicles.

Councillors need to be fully informed about the challenges to Council in order to consider the Constituents concerns.

Motion: **Moved:** Clr Rhodes **Seconded:** Clr Green

Bring a report back to a November Workshop that identifies the challenges, opportunities and cost implications for the following:

1. The build and maintenance of current residential narrow street widths when compared to a new minimum width, increased in width to address the practical needs of our residents and that includes traffic calming devices that ensures the same safety concerns as was proposed by making the streets so narrow.
2. Any increase in the cost of Housing as a result of increased Residential Street widths in new developments if implemented.

3. Councils advice on challenges and appetite to object to the SEPPs that might override Councils vision to increase the minimum residential street widths, if implemented.
4. The current cost to provide in-bay-parking in existing and new narrow streets.

On being put to the meeting the motion was declared CARRIED.

Many residents of Edmondson Park have expressed concerns for a number of years about the lack of street trees in the suburb.

Planting street trees will enhance the landscape and beauty of the suburb, help regulate temperature by addressing the Urban Heat Island effect and create better sustainable living conditions.

Recently, Council undertook a tree planting event in partnership with Landcare in Cecil Hills for National Tree Day, which was well attended by many local residents and especially local children.

Many local roads are still bare throughout Edmondson Park, and there is still a significant need for local green spaces and recreational facilities for local residents. Engagement around such an initiative is also quite important.

Motion: **Moved: Clr Kaliyanda** **Seconded: Clr Green**

1. Develop a series of tree planting initiatives for Edmondson Park; and
2. Engage with local residents to develop and promote these initiatives.

Chairperson

Clr Rhode left the chambers during this item at 3.26pm.

ITEM NO: MOU 01

SUBJECT: Logistical support for the 'Battle of Beersheba Memorial Service'

Clr Macnaught requested Mayor Mannoun accept a Motion of Urgency in relation to logistical support for the 'Battle of Beersheba Memorial Service' that will be held on 29th October 2023. She stated it was urgent due to the event taking place in the next month and that it could not wait until the 25 October 2023 Council meeting.

In accordance with Clause 9.3 of Council's Code of Meeting Practice, Mayor Mannoun, ruled the above matter as urgent and as such it was dealt with at this meeting as shown below:

COUNCIL DECISION

Motion: **Moved: Clr Macnaught** **Seconded: Clr Ammoun**

That Council provides logistical support for the 'Battle of Beersheba Memorial Service' that is held annually in Liverpool, to be held this year on the 29th of October.

On being put to the meeting the motion was declared CARRIED.

Clr Rhodes returned to the chambers at 3.28pm.

ITEM NO: OPER 01

FILE NO: 301942.2023

SUBJECT: Managing Drainage Channels and Waterways

COUNCIL DECISION

Motion:

Moved: Clr Harle

Seconded: Clr Green

That Council defers the implementation and for the report to come back to the 25 October 2023 Council Meeting and direct the CEO to organise a visit of relevant sites.

On being put to the meeting the motion was declared CARRIED.

Clr Hagarty asked that he be recording as having voted against the motion.

Motion: **Moved: Clr Hagarty** **Seconded: Clr Green**

- Items **CONF 01** – Liverpool Local Planning Panel (LLPP) – Replacement Community Representative, **CONF 02** – Order of Liverpool Awards 2023 and **CTTE 03** Minutes of the Civic Advisory Committee are confidential pursuant to Section 10A(2)(a) of the Local Government Act 1993 because it contains *personal matters concerning particular individuals (other than councillors)*.
- Item **CONF 03** - Report on Surge Pricing is confidential pursuant to the provisions of s10a(2)(d i) of the *Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it.*
- Item **CONF 04** - Fire and Rescue Referrals is confidential pursuant to *the provisions of s10A(2)(g) of the Local Government Act because it contains advice concerning litigation, or advice that would otherwise be privileged from production in legal proceedings on the ground of legal professional privilege.*
- Items **CONF 05** - Purchase of Lot 25 DP 1249950, Winterhead Street, Austral for local drainage, item **CONF 09** – Purchase of Lot 1 DP 1257931, 62 Kelly Street, Austral for RE1 Public Recreation and Item **CONF 10** - Exemption from Tender - Australian Election Company are *confidential pursuant to the provisions of s10A(2)(c) of the Local Government Act because they contain information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business.*
- Item **CONF 06** - Proposed Waste Precinct are confidential *pursuant to the provisions of s10A(2)(d i) (d ii) (d iii) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it; AND commercial information of a confidential nature that would, if disclosed confer a commercial advantage on a competitor of the Council; AND commercial information of a confidential nature that would, if disclosed reveal a trade secret.*
- Item **CONF 07** - Circular Economy Project (CEP) 1 is *confidential pursuant to the provisions of s10A(2)(d i) (d ii) (d iii) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed prejudice the commercial position of the person who supplied it; AND commercial information of a confidential nature that would, if disclosed confer a commercial advantage on a competitor of the Council; AND commercial information of a confidential nature that would, if disclosed reveal a trade secret.*

- **CONF 08** - WT3265 - Hammondville Park - Synthetic Turf Soccer Oval Tender is confidential *pursuant to the provisions of s10A(2)(d ii) of the Local Government Act because it contains commercial information of a confidential nature that would, if disclosed confer a commercial advantage on a competitor of the Council.*

On being put to the meeting the motion was declared CARRIED.

Clr Macnaught returned to the Chambers at 4.09pm.

RECESS:

Mayor Mannoun called a recess of Council at 4.09pm to allow members of the gallery to leave the Chambers.

CLOSED SESSION:

The meeting resumed at 4.12pm in Closed Session with all Councillors present.

CONFIDENTIAL ITEMS

ITEM NO: CONF 01

FILE NO: 271963.2023

SUBJECT: Liverpool Local Planning Panel (LLPP) - Replacement Community Representative

Mayor Mannoun and Clrs Rhodes, Ammoun, Goodman, Hadid and Macnaught left the Chambers at 4.19pm.

As there was no quorum, the item was then deferred by the CEO so that Councillors can return to the Chambers.

The CEO stated that he will then submit to Council that his view is that Council now needs to make a decision as to whether the CEO proceeds to appointing the community members or if Council are going to consider appointing the members and it will come back to the next council meeting with recommendations.

Mayor Mannoun and Clrs Rhodes, Ammoun, Goodman, Hadid and Macnaught returned to the Chambers at 4.21pm.

The CEO then advised the Councillors that there was no quorum. He stated that as CEO he had no choice but to defer to the next council meeting. It is now a matter for Council to determine whether they wish to move another motion or simply allow this item to be deferred to the next council meeting.

Council then resubmitted the motion and the item was then dealt with as shown below:

ITEM NO: CONF 02
FILE NO: 285053.2023
SUBJECT: Order of Liverpool Awards 2023

COUNCIL DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Rhodes**

That Council:

1. Endorse the award recipients as recommended by the Civic Advisory Committee at its meeting on 17 August 2023;
2. Amend the Policy and the Charter to allow people who work, volunteer or serve the City of Liverpool to qualify for this;
3. Undertake proper checks on people nominated;
4. Review the process to ensure that it's a more appropriate one;
5. That the nominees (that have been excluded) be reconsidered based on the above at a future date;
6. If a member of the committee nominates someone for an award they should not be scoring or voting on that award but that the Policy is amended to allow Councillors to nominate people but still participate;
7. When nominations are made, that it is stipulated what award they are being nominated for;
8. Notes that two of the candidates being recommended for the Member of Order of Liverpool award are honorary as they do not reside in Liverpool; and
9. A report to come back to Council with an updated Policy and Charter.

Cllr Hadid retired from the meeting at 4.58pm.

Cllr Ammoun left the chambers at 4.58pm

Cllr Ammoun returned to the Chambers at 5.01pm.

On being put to the meeting the motion was declared CARRIED

That Council:

Motion: **Moved: Clr Green** **Seconded: Clr Rhodes**

1. Note the inspection report by Fire and Rescue NSW, as shown in Attachment 1.
2. Not exercise its powers to issue a Fire Safety Order at this time to address the identified fire safety deficiencies at 4-6 Browne Parade Warwick Farm.

On being put to the meeting the motion was declared CARRIED.

Motion: **Moved: Clr Harle** **Seconded: Clr Rhodes**

1. Purchases Lot 25 DP 1249950, Winterhead Street, Austral for the price and terms as outlined in this report.
2. Upon settlement classifies Lot 25 DP 1249950 as “Operational Land”.
3. Keeps confidential this report pursuant to the provisions of Section 10A(2)(c) of the Local Government Act 1993 as this information would, if disclosed confer a commercial advantage on a person with whom Council is conducting (or proposes to conduct) business; and
4. Authorises the CEO or delegate to execute any documents necessary to give effect to this decision.

.....

Chairperson

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Ammoun**

1. Receive and note this report;
2. Investigate an extra yellow bin pick up for the Christmas season and report to the next council meeting;
3. Investigate the frequency of pick-ups in the Liverpool CBD and report back to the next Council meeting with regards to the specific issues regarding Ibis birds.

Chairperson

Motion: **Moved: Clr Rhodes** **Seconded: Clr Macnaught**

1. That Council acknowledge this Report
2. That Council delegate the CEO (or delegate) to enter into negotiations around a service agreement with interested Councils
3. Note that the agreed service charge will be included as part of the Fees and Charges setting process 2024/2025; and
4. That Council delegate the CEO (or delegate) to investigate proposed options around the financing and funding arrangements for the Project and report back to Council.
5. Direct the CEO to bring a report back to Council.

Chairperson

Motion: Moved: Clr Macnaught **Seconded:** Clr Rhodes

1. Accept the Tender from Limonta Sports Australia Pty Ltd for Tender WT3265 Hammondville Park - Synthetic Turf Soccer Oval, for Portions 1, 3, 4, 5 and 9, for an initial term of 42 weeks (16 weeks construction program and 26 weeks defects liability period) at the GST inclusive price of \$2,621,191.
2. Makes public its decision regarding tender WT3265 Hammondville Park - Synthetic Turf Soccer Oval.
3. Notes that the Chief Executive Officer will finalise all details and sign the Letter of Acceptance for the tender, giving it contractual effect, in accordance with delegated authority.
4. Keeps confidential the details supplied in this report containing information on the submissions received, pursuant to the provisions of Section 10A(2)(d)(i) of the Local Government Act 1993 as it contains commercial information of a confidential nature that would, if disclosed, prejudice the commercial position of the person who supplied it.

Chairperson

Motion: **Moved: Clr Macnaught** **Seconded: Clr Green**

1. Purchase Lot 1 DP 1257931, 62 Kelly Street, Austral for the price and terms as outlined in this report.
2. Upon settlement classifies Lot 1 DP 1257931 as “Community Land”.
3. Keeps confidential this report pursuant to the provisions of Section 10A(2)(c) of the Local Government Act 1993 as this information would, if disclosed confer a commercial advantage on a person with whom Council is conducting (or proposes to conduct) business; and
4. Authorises the CEO or delegate to execute any documents necessary to give effect to this decision.

.....

Chairperson

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Rhodes**

1. Council agree to contract with the Australian Election Company to administer the elections of the Council.
2. Council agree pursuant to section 55(3)(i) of the Local Government Act 1993 not to tender the contract to administer the elections of the Council as, due to the following circumstances, a satisfactory result would not be achieved by inviting tenders:
 - Council resolved on 1 March 2023 to engage a private provider;
 - There is only one private provider that can deliver the service.
3. Council authorise the Chief Executive Officer or delegate to take all steps necessary to implement these resolutions.
4. Staff work with the Australian Election Company to negotiate any possible further savings.

Chairperson

Motion: Moved: Mayor Mannoun Seconded: Clr Green

1. Receives and notes the Minutes of the Civic Advisory Committee meeting held on 17 August 2023;
2. Endorse the actions in the Minutes; and
3. Endorse the updated Civic Awards Policy.

OPEN SESSION

Mayor Mannoun moved the meeting into Open Session at 5.28pm. Mayor Mannoun read the resolutions for CONF 01, CONF 02, CONF 03, CONF 04, CONF 05, CONF 06, CONF 07, CONF 08, CONF 09, CONF 10 and CTTE 03 that were resolved in Closed Session.

THE MEETING CLOSED AT 5.30pm.

<Signature>

Name: Ned Mannoun

Title: Mayor

Date: 25 October 2023

I have authorised a stamp bearing my signature to be affixed to the pages of the Minutes of the Council Meeting held on 27 September 2023. I confirm that Council has adopted these Minutes as a true and accurate record of the meeting.

PLAN 01**Endorsement to Participate in Non-LED Street Light Replacement Program**

Strategic Objective	Healthy, Inclusive, Engaging Support active and healthy lifestyles by improving footpaths, cycleways and walkways and other infrastructure that promotes and supports active transport
File Ref	282412.2023
Report By	Charles Wiafe - Manager Transport Management
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

Endeavour Energy has adopted a program to forward fund replacement of existing non-LED lamps and assemblies in its distribution area with the LED lanterns, at a cost of \$50 million, over a three-year period, till June 2024.

Under the program, the company has replaced or is replacing non-energy efficient lamps in most of the Liverpool Government Areas (LGAs) under its distribution area. Liverpool LGA is one of remaining Councils yet to commit to participate in program.

Endeavour Energy executives gave a presentation on the program to Council Executives about 18 months ago, and invited Council to participate in the non-LED street lighting replacement program.

Council's commitment has been delayed due to delay in obtaining information on a revised business case, from the company, and the company's program to complete the street light replacements in others LGAs that committed to participate in the program earlier.

The company has now provided a revised business case, and has advised that it is ready to undertake the replacement in the Liverpool LGA from January 2024, to be completed in June 2024, with the following summary information:

- Number of non-energy efficient streetlights to be replaced - 10,582 streetlights (56% of the total).
- Residual value of streetlights to be replaced - \$815,447 to be repaid to the company through monthly invoices this financial year.
- Value of Energy Saving Certificates (ESCs) to be generated after the replacements - \$959,912 based on the current market value.
- Income from sale of the ESCs, approximately \$144,465.

- e. Additional annual saving on maintenance and energy supply, approximately \$717, 000.

Endeavour Energy has requested Council's commitment to participate in the street light replacement program by October 2023. After the commitment, Endeavor Energy will prepare an agreement to be entered for the street light replacements.

The replacement of non-energy efficient lamps/lanterns with LED lamps is one of Council's key actions in its adopted climate change action plan and is crucial and therefore, Council needs to participate in the non-LED replacement program to ensure the climate change action is achieved.

RECOMMENDATION

That Council:

1. Notes its participation in the Endeavour Energy non-energy efficient street light replacement program.
2. Approves a budget of approximately \$815,000 for additional payments for street light management for this financial year.
3. Notes the participation in the street light replacement program will assist Council in achieving one of its key actions in its adopted climate change action plan.

REPORT

Endeavour Energy is the network distributor for Sydney's Greater West, the Blue Mountains, Southern Highlands, the Illawarra and the South Coast.

In accordance with the NSW Street lighting Code, the company owns and manages the street lights in distribution area for the relevant local government areas including Liverpool LGA.

Endeavour Energy has previously worked with WSROC and other Councils in its distribution area to replace approximately 100,000 much older and non-energy efficient street lights under the "Light Years Ahead" program, about eight years ago.

The company has adopted a new program to continue replacement of the remaining approximately 125,000 non-energy efficient street lights with energy efficient LED lights. This would include the replacement of 10,582 non-energy efficient street lights, in the Liverpool LGA.

The "Light Years Ahead" program, was funded by Federal Government Grant with part contribution from the relevant Councils, paid over 3-year instalments. Under the new program,

Endeavour Energy has offered to forward fund the replacements at a cost of \$50 million, till June 2024.

Under the new program, the company has replaced or is replacing non-energy efficient street lights in most of the Liverpool Government Areas (LGAs) under its distribution area. Liverpool LGA is one of remaining Councils yet to commit to participate in program.

Endeavour Energy executives gave a presentation on the program, to Council Executives about 18 months ago, and invited Council to participate in the non-LED street lighting replacement program.

Council's commitment has been delayed due to delay in obtaining information on a revised business case, from the company, and the company's program to complete the street light replacements in the LGAs that committed earlier to participate in the program.

The company has now provided Council, a revised business case, and advised that it is ready to undertake the replacements in the Liverpool LGA from January 2024, to be completed in the June 2024. The business case includes the following summary information:

- a. Number of non-LED streetlights to be replaced - 10,582 street lights (56% of the total).
- b. Residual value of streetlights to be replaced - \$815,447 to be repaid to the company through monthly invoices this financial year.
- c. Value of Energy Saving Certificates (ESCs) to be generated - \$959,912 based on the current market value.
- d. Income from sale of the ESCs, approximately \$144,465.
- e. Additional annual saving on maintenance and energy supply.

Environmental Benefits

Endeavour Energy has advised that due to the lower emissions and higher operational efficiency of LED lighting, it is expected that there will be significant electricity savings and subsequent reduction in carbon emissions.

The replacement program will lead to energy savings of 3,593,561Wh / annum, which equates to 2,911 tonnes of CO₂.

FINANCIAL IMPLICATIONS

- a) Participation in the Endeavour Energy's street light replacement programme would require Council to make a payment of \$815,447, which has not been budgeted for.
- b) After the payment of the monthly and sale of the Energy Saving Certificate (ESC) that would be generated, Council would be able to sell the ESCs at \$959,912 and generate an income of approximately \$144,465.

- c) The estimated annual financial benefit is \$717,000 in annual savings. This will be made up of:
- Commodity savings of \$537,000 per annum
 - Network Use of System (NUOS) savings of \$402,000 per annum
 - These will be offset by increased Street Light Use of System (SLUOS) Charges of \$222,000.

The equivalent financial benefit is approximately \$14 million over the next 20 years. The annual saving may be reduced due to the additional street lights that would be installed as part of new subdivisions within the LGA.

Endeavour Energy has requested Council's commitment to participation in the street light replacement program by October 2023. After the commitment Endeavor Energy will prepare an agreement to be entered for the replacement.

The replacement of non-energy efficient streetlights with LED lamps is one of Council's key actions in its adopted climate change action plan and it is crucial for Council to participate in the non-LED replacement program to ensure the climate change action is achieved.

CONSIDERATIONS

Economic	Deliver a high-quality local road system including provision and maintenance of infrastructure and management of traffic issues.
Environment	Promote an integrated and user-friendly public transport service. Support the delivery of a range of transport options.
Social	Support access and services for people with a disability. Improve road and pedestrian safety.
Civic Leadership	Actively advocate for Federal and State government support, funding and services.
Legislative	Roads Act.
Risk	The risk is deemed to be Low.

ATTACHMENTS

Nil

PLAN 02

Proposed Amendments to Liverpool Development Control Plans - Social Impact Assessment

Strategic Objective	Healthy, Inclusive, Engaging Communicate, listen, engage and respond to the community by encouraging community participation
File Ref	293642.2023
Report By	Liana Pham - Strategic Planner
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

At its Ordinary Meeting of Council of 26 October 2022, Council resolved to endorse the draft Social Impact Assessment Policy & Guidelines, to undergo public exhibition for a period of 28 days. As no comments were received, the Social Impact Policy and Guidelines were registered on Council's policy register list and uploaded to Council's website, in accordance with this resolution.

In summary, the purpose of the Social Impact Assessment Policy and Guidelines is to:

- Ensure Social Impact Assessment is integrated into Council's decision-making process processes;
- Identify and manage likely social impacts of proposed developments to maximise social outcomes; and
- Clarify when a Social Impact Assessment is required.

Social Impact Assessment (SIA) is the process of assessing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions including policies, legislations and development proposals. SIA's are required for certain types of development, to understand and manage its likely social impacts.

Following the adoption of the updated Social Impact Assessment Policy and Guidelines, a housekeeping amendment to the Liverpool Development Control Plan 2008 (LDCP 2008), Part 1 Chapter 27 Social Impact Assessment. This is to ensure the DCP reflects the updates from the new Social Impact Assessment Policy & Guidelines, so they are implemented in the development assessment process.

It is recommended that that the Draft LDCP 2008 amendment is exhibited in accordance with Council's Community Participation Plan, and if no objecting submissions are received, the LDCP 2008 amendments be made.

RECOMMENDATION

That Council:

1. Supports in principle the proposed amendments to the Liverpool Development Control Plan 2008, Part 1 Chapter 27 Social Impact Assessment.
2. Delegates authority to the CEO (or delegate) to make minor or typographical changes to the DCP prior to public exhibition;
3. Undertake public exhibition of the draft LDGP 2008 amendment, in accordance with the Liverpool Community Participation Plan; and
4. Delegates to the CEO the finalisation of the draft LDGP 2008 Part 1 Chapter 27 Social Impact Assessment, should no objecting submissions be received; or receive a report summarising the details of the submissions upon conclusion of the exhibition period.

REPORT

Updated Social Impact Assessment Policy & Guidelines

Social Impact Assessment (SIA) is the process of assessing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions including policies, legislations and development proposals.

When undertaken as part of a Development Approval process, an SIA is prepared to assist the relevant consent authority to make an informed decision. Its primary purpose is to bring about a more social, culturally, ecologically and economically sustainable and equitable environment.

The purpose of the Social Impact Assessment Policy and Guidelines (**Attachment 2**) includes the following:

- Ensure Social Impact Assessment is integrated into Council's decision-making process processes;
- Identify and manage likely social impacts of proposed developments to maximise social outcomes; and
- Clarify when a Social Impact Assessment is required.

Following a peer review of Council's previous Social Impact Assessment Policy & Guidelines, on 26 October 2022, Council endorsed updates to this document. Updates to the document included:

- A revision of policy statement to align better with the SIA requirements and scope;
- Expand the list of development proposal types for which SIA is required;
- Reserve the right of Council to require a SIA for any development in addition to the list for which it considers appropriate.

The Social Impact Assessment Policy & Guidelines was placed on community exhibition from 18 November to 16 December 2022, and no submissions were received. The document was then adopted and placed on Council's website.

Proposed DCP Amendment

The Liverpool Development Control Plan 2008 (LDCP 2008), Part 1 Chapter 27 Social Impact Assessment, provides objectives and controls relating to Social Impact Assessment. In light of the adopted updated Social Impact Assessment Policy & Guidelines, this chapter is required to be updated to reflect the new document.

Key changes to the LDCP 2008 include:

- Adding (in the 'Note') that "*Council reserves the right to require a SIA for any development for which it considers*" in addition to those are listed in Table 21
- Revising the list of development types that requires Social Impact Comment or Comprehensive Social Impact Assessment.

Refer to **Attachment 1** for the Draft LDCP 2008, Part 1, Chapter 27 Social Impact Assessment amendment.

Recommendation

This report recommends that Council endorses placing the draft LDCP 2008, Part 1, Chapter 27 Social Impact Assessment, on public exhibition for a period of 28 days, in accordance with Council's Community Participation Plan.

If there are no objections to the draft LDCP amendment, the amendment is to be finalised, alternatively, if objections are received, a report will be presented to Council.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this recommendation.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	Support policies and plans that prevent crime. Promote community harmony and address discrimination.
Civic Leadership	Undertake communication practices with the community and stakeholders across a range of media.

PLANNING & COMPLIANCE REPORT

Legislative	Part 3, Div. 3.6 of <i>Environmental Planning & Assessment Act 1979</i> . Clause 13 of <i>Environmental Planning & Assessment Regulations 2021</i>
Risk	The risk is deemed to be Low. The risk is considered within the Council's risk appetite.

ATTACHMENTS

1. Attachment 1. Draft DCP Part 1 Section 27 Social Impact Assessment - For Exhibition
2. Attachment 2. Social Impact Assessment Policy and Guidelines - March 2023

27. Social Impact Assessment

Applies to

This section applies to applications for the types of development listed in Table 21, and any other types of development if notified in writing by Council. This section does not apply to development that is otherwise permitted without consent.

Background

Social impacts include the intended and unintended effects of a change or activity on the well-being of a community, families and individuals. Demand for a greater focus on social impacts has been driven by:

a changing demographic profile and pressures arising from the growth and positioning of Liverpool as the regional city for Southwestern Sydney;

increasing awareness of planning authorities to apply social criteria in making decisions about development and land use;

increasing emphasis by Council and the community in considering social issues.

Council has a statutory obligation under Section 79C s4.15 of the Environmental Planning and Assessment Act 1979 to consider the social impacts of development applications. The Liverpool Local Environmental Plan 2008 aims to "foster economic, environmental and social well-being so that Liverpool continues to develop as a sustainable and prosperous place to live, work and visit".

Social impact assessment is a process that aims to identify and manage the potential positive and negative consequences of development to optimize social outcomes, consistent with Council's objectives for the community. Council is committed to the process of social impact assessment as a means of considering social issues more comprehensively and consistently in its planning and decision making. Council requires a social impact assessment to be submitted with development applications for specific types of development. In addition, Council may, at its discretion, require a social impact assessment for other types of development.

Objectives

- a) To ensure distributional equity of positive and negative social impacts of development, to help build healthier communities where people want to live and work;
- b) To apply a precautionary approach to, and encourage effective community engagement and participation in, planning and development decisions that may have significant impact.
- c) To ensure social impact assessments are undertaken in a consistent and transparent manner, by an appropriately trained person, and contain the information required to enable objective evaluation of potential impacts by Council.

Controls

1. A social impact assessment shall be submitted with a development application for all types of development listed in Table 21. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment, as specified in Table 21.
2. Council may, at its discretion, alter the requirements for social impact assessment at any stage of the development assessment process, if it deems a proposal to foreseeably generate or contribute to social impacts that are substantially less or more significant than envisaged in Table 21. This discretion rests with the

Executive Management Team, with consideration of recommendations made by Council staff.

3. A social impact assessment shall be submitted for any types of development not listed in Table 21 if, at any stage of the development assessment process, Council deems the proposal to foreseeably generate or contribute to significant social impacts. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment.
4. Any social impact assessment shall be prepared in accordance with Council's Social Impact Assessment Policy.

Note:

Applicants are advised to consult with Council before lodging a development ~~assessment~~ application to discuss Council's specific requirements relating to social impact assessment. Council will notify applicants in writing of any changes to requirements for social impact assessment. In addition to this list, Council reserves the right to require a SIA for any development for which it considers.

Table 24 21 Types of development for which a social impact assessment is required

Type of development	Social Impact Comment	Comprehensive Social Impact Assessment
Residential development	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> - Residential flat buildings greater than 20 units - Multi-dwelling housing greater than 20 dwellings - Residential subdivision greater than 20 dwellings - Affordable housing, within the meaning of SEPP (Affordable Rental Housing) 2009 — excluding secondary dwellings - Housing for seniors or people with a disability, within the meaning of SEPP (Housing for Seniors or People with a Disability) 2004 - Student housing - Housing within SEPP (Housing) 2021 including Affordable Housing (e.g. boarding house) and Diverse Housing (e.g. housing for seniors and people with a disability), excluding secondary dwellings - Caravan parks - Backpackers' Accommodation 	<p>Application for development of, or major changes to:</p> <ul style="list-style-type: none"> - Residential flat buildings greater than 250 100 units - Development that results in a reduction of affordable housing

Commercial development	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> - Entertainment facilities - Amusement centers (<i>greater than 100 persons capacity</i>) - Function centers (greater than 100 persons capacity) - Retail centres and other commercial development, including tattoo parlours - <i>Commercial premises which includes Business premises, Retail premises and Office premises, including tattoo parlors</i> - <i>Veterinary hospital</i> - <i>Animal training & boarding establishments</i> 	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> - Packaged liquor outlets - Hotels (bars, pubs, taverns), nightclubs and registered clubs - <i>Cellar Door Premises</i> - <i>Licensed public entertainment facility-cinema or theatre</i> - Applications for liquor licenses and gaming machines* - Extension of trading hours for licensed premises - Gambling outlets - Restricted premises (e.g., sex shops, <i>gun shops</i>) - Sex services premises (e.g., brothels) - Gun shops
Other types of development	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> - Childcare centres (more than 20 places) - Places of public worship (greater than 200 persons capacity) - Educational establishments - Health consulting rooms - Council-owned & <i>private</i> community facilities, including community centers, libraries, <i>youth centers</i> and recreation facilities (<i>greater than 100 persons capacity</i>) - Community land, as classified by the Local Government Act 1993 	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> - Drug rehabilitation services - including methadone clinics and safe injecting rooms - <i>Cemetery/crematorium</i> - <i>Mortuary</i> - <i>Health Services facilities including</i> hospitals, medical centers, community health service facilities - Freight transport facilities - Major public transport facilities - <i>Passenger Transport Facilities</i> - <i>Helipad</i> - <i>Airstrip</i> - <i>Air transport facilities (includes airport & heliport)</i> - <i>Waste or resource management facilities</i> - <i>Heavy industry</i>



SOCIAL IMPACT ASSESSMENT POLICY AND GUIDELINES

Adopted: March 2023

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ACRONYMS

IAIA	International Association of Impact Assessment
AFH	Affordable Rental Housing
CPTED	Crime Prevention through Environmental Design
CSIA	Comprehensive Social Impact Assessment
DA	Development application
DCP	Development Control Plan
DPE	Department of Planning & Environment
EIA	Environmental Impact Assessment
EP&A Act	Environmental Planning & Assessment Act
FSR	Floor Space Ratio
ILGA	Independent Liquor & Gaming Authority
LCPP	Liverpool Local Planning Panel
LEP	Local Environmental Plan
LGA	Local Government Authority
LGNSW	Local Government NSW
L&G NSW	Liquor & Gaming NSW
LIA	Local Impact Assessment
LSPS	Local Strategic Planning Statement
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SIC	Social Impact Comment
SWS	Southwestern Sydney
VPA	Voluntary Planning Agreement

1. POLICY STATEMENT

- 1.1 Liverpool City Council is determined to exercise its responsibility to make equitable and precautionary social impact assessments in the public interest. Specifically, Council is determined to apply principles of precaution, social justice and distributional equity to decisions about proposed land use and changes to land use which are likely to have social consequences. To provide an evidentiary basis for its decision, Council requires a social impact assessment to accompany the specific development proposals.
- 1.2 This policy is grounded in the principles of sustainability, access, equity, participation and human rights, and is governed by Council's Social Justice Policy.
- 1.3 Demand for a greater focus on social impact is driven by:
 - a) A changing demographic profile and pressures arising from the growth and positioning of Liverpool as the third CBD of Sydney and its importance for Southwestern Sydney through:
 - Rapid population growth and demand for development including infrastructure to support the growth; and
 - The construction of Western Sydney Airport and the development of the Aerotropolis within the Liverpool LGA.
 - b) Increased awareness among planning authorities for the need to apply social impact analysis in making decisions about development and land use;
 - c) Increased emphasis by Council and the community in considering social issues; and
 - d) Increased demand for community participation in decision making processes.
- 1.4 Having a process to include SIA as part of the planning and development assessment process allows Council to:
 - a) Enhance consistency and transparency.
 - b) Ensure that the opportunity for positive impacts are maximized and that potential negative impacts are avoided, minimised or mitigated;
 - c) Consider community needs and ensure they are met in an equitable way.
 - d) Acknowledge that social justice and environmental justice are intrinsically interconnected and ensure the environmental, social and economic qualities of the local area are enhanced as a result of permitted development.
 - e) Facilitate and/or request a genuine community engagement process and ensure consideration of community feedback.
 - f) Contribute to education, training and employment, capacity building and ensure a greater understanding of certain developments and interventions within the community; and
 - g) Give consideration to the alternatives of any planned intervention particularly in cases of unavoidable impacts.

1.4.1. Under this Policy, Council will:

- a) Require a Social Impact Comment (SIC) or a Comprehensive Social Impact Assessment (CSIA) as a component of applications for specific types of development;
- b) Require an CSIA for significant new or revised strategic land use plans, including LEP and master plan;
- c) Require an SIA for new, staged or revised projects, policies, or plans that may trigger social change;
- d) Require the consideration of social impacts in Council's reporting processes to further enhance Council policy and decisions.
- e) Review requests from other government agencies for consideration of social impacts, for example, liquor and gaming applications and new planning policies and submissions; and
- f) Review and make submissions for policies, plans or projects of State or Federal government agencies that may have an impact on the community.

1.4.2. International Principles Specific to SIA Practices

The "International Principles for Social Impact Assessment" is a statement of the core values shared by the SIA community, together with a set of principles to guide SIA practice; to include consideration of 'the social' in impact assessment generally. Principles which are endorsed by the International Association for Impact Assessment (IAIA), in addition to providing an overarching look at the concepts governing the SIA practice, are also used as a basis for developing and or revising sector, national and local guidelines.

- a) Equity considerations should be a fundamental element of impact assessment and of development planning.
- b) Many of the social impacts of planned interventions can be predicted.
- c) Planned interventions can be modified to reduce their negative social impacts and enhance their positive impacts.
- d) SIA should be an integral part of the development process, involved in all stages from inception to follow-up audits.
- e) There should be a focus on socially sustainable development, with SIA contributing to the determination of best development alternative(s) – SIA (and EIA) have more to offer than just being an arbiter between economic benefit and social cost;
- f) In all planned interventions and their assessments, avenues should be developed to build the social and human capital of local communities and to strengthen democratic processes.
- g) In all planned interventions, but especially where there are unavoidable impacts, ways to turn impacted peoples into beneficiaries should be investigated.

- h) The SIA must give due consideration to the alternatives of any planned intervention, but specially in cases when there are likely to be unavoidable impacts.
- i) Full consideration should be given to the potential mitigation measures of social and environmental impacts, even where impacted communities may approve the planned intervention and where they may be regarded as beneficiaries.
- j) Local knowledge and experience and acknowledgment of different local cultural values should be incorporated in any assessment.
- k) There should be no use of violence, harassment, intimidation or undue force in connection with the assessment or implementation of a planned intervention; and
- l) Develop mental processes that infringe the human rights of any section of society should not be accepted.

2. SIA DEFINITION AND PROCESS

According to the International Association for Impact Assessment, "Social impact assessment includes the processes of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment."

When undertaken as part of a Development Application (DA) process, a SIA is prepared to assist the relevant consent authority in its informed decision-making. Its primary purpose is to bring about a more socio-culturally, ecologically and economically sustainable and equitable environment.

SIA, as a process includes the effective engagement of affected communities in participatory processes of identification, assessment and management of social impacts. Although SIA is used as an impact prediction mechanism and decision-making tool in regulatory processes, equally important is the role of SIA in contributing to the ongoing management of social issues throughout the whole project development cycle, from conception to post-closure. Like all other fields of practice, SIA is a community of practice with its own paradigm of theories, methods, case histories, expected understandings and values. What is meant and implied by 'social impact assessment' is the understanding of it within the SIA paradigm rather than any dictionary interpretation of the words social, impact, or assessment.

This paradigm is embodied and articulated in the International Principles for Social Impact Assessment which is provided in sub-clause 1.4.2. above.

Based on the NSW Department of Planning and Environment (2017) SIA - *"As a guide, a social impact is a consequence experienced by people due to change associated with a planned intervention (project, development, policy, program etc.) Social impacts can involve changes to a person's:*

- **Way of life**-including how people live-for example, how they get around their access to adequate housing; how people work-for example, access to adequate employment or working conditions and/or practices; how people play-for example, access to recreation activities; and how people interact with one another on a daily basis;
- **Community** - including its composition, cohesion, character, how it functions and sense of place;
- **Access to and use of infrastructure, services and facilities** - whether provided by local, state, or federal governments, or by for-profit or not-for-profit organizations or volunteer groups;
- **culture** - including shared beliefs, customs, values and stories, and connections to land, places, and buildings (including Aboriginal culture and connection to country)
- **health and wellbeing**-including physical and mental health;
- **surroundings** - including access to and use of ecosystem services, public safety and security, access to and use of the natural and built environment, and its aesthetic value and/or amenity;
- **personal and property rights** - including whether their economic livelihoods are affected, and whether they experience personal disadvantage or have their civil liberties affected;
- **decision-making systems** - particularly the extent to which they can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms; and
- **fears and aspirations** - related to one or a combination of the above, or about the future of their community."

3. PURPOSE

The Social Impact Policy seeks to:

- a) Acknowledge the importance and rationale for Social Impact Assessment (SIA) processes and provide a framework for ensuring that SIA is effectively integrated into Council's decision-making processes;
- b) Identify and manage the likely social impacts of proposed developments, policies, plans and planning instruments to maximize social outcomes, community wellbeing and social sustainability;
- c) Clarify when a SIA is required, how it is to be undertaken and how the outcomes arising from the assessment are to be implemented and managed. The policy is accompanied by Council's SIA Guidelines;
- d) Affirm Council's commitment to the process of SIA as a means of considering social issues comprehensively, including cumulative impacts and ensuring the needs of the current and future populations are at the forefront of planning and decision-making processes;

- e) Seek to promote a more socio-culturally, economically and ecologically sustainable and equitable environment while building capacity and social capital in the community; and
- f) Respond to and plan for incoming growth and needs of the Liverpool community in a holistic strategic consideration and timely manner.

4. LEGISLATIVE REQUIREMENTS

4.1. *Environmental Planning and Assessment Act 1979(EP&A Act)* as follows:

- a) To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;
- b) To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;
- c) To promote the orderly and economic use and development of land;
- d) To promote the delivery and maintenance of affordable housing;
- e) To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;
- f) To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);
- g) To promote good design and amenity of the built environment;
- h) To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants;
- i) To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State;
- j) To provide increased opportunity for community participation in environmental planning and assessment; and
- k) Highlighted phrases or concepts are relevant to the SIA process.

Matters for consideration: The determination of a development application includes a consent authority to take into consideration the following matters of relevance to that apply to the land to which the development application relates:

- a) The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.
- b) The suitability of the site for the development,
- c) Any submissions made in accordance with this Act or the regulations
- d) The public interest.

Each of these highlighted phrases or concepts can be relevant to the assessment of social impacts. For example, the sensitivities of communities to a particular land use may be so significant that they render the site unsuitable for the proposed development under (c) for example, a large discount bottle shop near a large public housing estate.

4.2 *Local Government Act 1993 (LGA1993) Section 8 A Guiding Principles for Councils:*

- a) Councils should manage lands and other assets so that current and future local community needs can be met in an affordable way.
- b) Councils should act fairly, ethically and without bias in the interests of the local community.
- c) Councils should consider social justice principles.
- d) Councils should consider the long term and cumulative effects of actions on future generations.
- e) Council decision-making should be transparent, and decision-makers are to be accountable for decisions and omissions.

4.3 *Liverpool Development Control Plan (DCP)2008.Part1section 27*

Council's DCP supports Section 4.15 of the *Environmental Planning and Assessment Act1979* to consider the social impacts of development applications, adopting the requirement for a Social Impact Assessment (SIA) to be submitted with development applications for specific types of developments.

4.4 *Gaming Machines Act 2001*

The Act Specifies the conditions under which clubs and hotels are required to lodge a Local Impact Assessment (LIA) with the Liquor Administration Board and with Council and other community agencies.

4.5 *Liquor Act 2007*

The Act Specifies the circumstances under which an application for a new liquor license, variation of a liquor license, or extended trading hours, require the applicant to lodge a Community Impact Statement (CIS) with the Office of Liquor Gaming and Racing (OLGR) and to notify Council in accordance with Section 48 of the Act.

4.6 *State Environmental Planning Policy (Affordable Rental Housing)2 009, Part 2:*

Provision of new affordable housing and Part 3, retention of low cost rental accommodation.

4.7 Requirements under other Commonwealth and State legislation, including:

- a) *NSW Disability and Services Act 1993.*
- b) *Federal Disability Discrimination Act 1992.*

5. LIVERPOOL CITY COUNCIL POLICY REQUIREMENTS

5.1. *Social Justice Policy 2018*

Council's Social Justice Policy provides the foundation and guiding principles for Council's commitment and actions to protect human rights for all its residents and promotes the key values of freedom, respect, equity and dignity.

5.2. *Connected Liverpool 2040, Local Strategic Planning Statement (LSPS) 2020*

The LSPS sets Liverpool City Council's strategic planning vision for the next 20 years. It lists planning priorities across four areas: Connectivity, Productivity, Livability and Sustainability. The LSPS will inform what type of growth occurs in the local government area, where it occurs and when it occurs. It sets out actions to deliver on the planning priorities in order to meet the community's future vision for Liverpool.

6. A) REQUIREMENTS FOR UNDERTAKING SIA

- 6.1 It is the applicant's responsibility to arrange and fund a SIA study.
- 6.2 SIA must be conducted by an appropriately trained professional in the field of social science and who has had experience preparing and applying social impact assessment. A checklist can be found in the accompanying SIA Guide to assist in determining whether or not a consultant is appropriately qualified to complete an SIA for submission to Council.
- 6.3 Applicants must provide sufficient information and analysis in the SIA, detailing the basis for identifying potential social impacts of their proposal. It is not sufficient to state that there will be no impact and that no mitigation or enhancement measures are required. Further information on what is required to be considered can be found in the SIA Guide.
- 6.4 The length and detail of the SIA should be commensurate with the scale of the development and significance of the likely social impacts. The SIA Guide provides further guidance as to the determination of 'significance' and level of impact of certain types of developments.
- 6.5 For planning proposals and re-zoning applications a Comprehensive Social Impact Assessment scoping paper outlining the potential social impacts will be required prior to gateway determination.

- 6.6 Applicants must ensure that their SIA adequately addresses all potential negative social consequences as well as positive social benefits and mitigation and/or management plans. The SIA should address the following types of impacts:
- a) Direct and indirect impacts.
 - b) Temporary (i.e. during construction) and permanent (i.e. Post-construction) impacts.
 - c) The potential for cumulative and distributional impacts.
 - d) The significance of potential impacts and mitigation measures relating to these.
- 6.7 Staged developments by a single proponent, or multiple proponents proposing developments of a significant scale within close proximity, must consider the cumulative impact to address this within the SIA and opt to prioritize public benefit generating incentives
- 6.8 The SIA should consider distributional equity, identifying who the likely beneficiaries of the proposal are and what these benefits are, as well as who is likely to suffer detriment and the nature of these detriments.
- 6.9 The SIA should demonstrate the strategic fit of the development, plan or policy proposal and how it relates to city, population projections, addressing key factors such as impacts on child care, schools, affordable housing, open space, libraries and to transport/walkability.
- 6.10 Council, the applicant, government agencies and the community all have an important role in the identification and assessment of social impacts. Community consultation with individuals and communities who are likely to be affected is a critical phase of the SIA process. Applicants are required to conduct a genuine consultation process with affected groups, and the scale and method used will depend on a number of factors, including:
- a) The community who are likely to be most affected.
 - b) The significance of the potential social impacts.
 - c) The duration of the impact.
 - d) The likely beneficiaries of the proposed development.
 - e) Those likely to be most negatively affected.
- 6.11 Community engagement must be adequate, meaningful and take place at a reasonable period of time before a development application, policy or plan is submitted to Council. Information on conducting effective community engagement is provided in the SIA Guide. Depending on the size and scope, Council may set a minimum timeframe and methodology of consultations.
- 6.12 Council has an expectation that applicants will propose effective impact mitigation measures. Council will not accept proposed mitigations which are not deliverable by the applicant. Any mitigation proposed must meet the following criteria:
- a) Tangible—real, substantial, definite.

- b) Deliverable—something that the applicant is able to deliver.
- c) Likely to be durably effective –longer-term lasting impact.

Double counting, or misrepresenting mitigation measures as public benefits will not be accepted.

- 6.13 Ideas, recommendations and promises related to mitigations, without an accompanied commitment to deliver, such as signed agreements, bond payments, local employment and/or procurement strategies or other tangible evidence, will not be taken seriously. Mitigation measures may also be included in the conditions of consent if a proposal is approved. Further guidance on adequate mitigations can be found in the SIA Guide.
- 6.14 An SIA should be considered with any public benefit offer associated with a Voluntary Planning Agreement (VPA), Developer contributions or other funding mechanisms (such as Section 7.11 and 7.12). Public benefits will be determined by Council, with the proponent, and may be linked to the recommendations with the commissioned SIA, or an alignment with Council's strategic documents, including but not limited to the provision of facilities and Recreation and Open Space for community use.
- 6.15 The discretion to use SIA as part of VPAs and Section 7.11 and 7.12 plans rests with the Director City Economy and Growth and Director City Community and Culture, on consideration of recommendations made by Council staff.
- 6.16 If Council deems the SIA incomplete or insufficient and requires more detailed analysis, it reserves the right to return the SIA to the applicant for revision.

6. B) REQUIREMENTS FOR PREPARATION of CSIA (the process)

Typically, the CSIA preparation process includes:

- **Review** of Proposal:
 - a) Review of all documentation (plans, drawings, relevant sub-consultant reports on parking, traffic, acoustics, etc.
 - b) Interview with proponent and/or planner/architect to seek clarification.
- **Scoping** of potential positive and negative social impacts regarding the proposal based on:
 - a) Relevant literature.
 - b) Professional expertise/experience.

- **Definition of 'localities'** for the purpose of the assessment, including preliminary scoping of distributional impacts (geographically and socially).
- **Detail investigation** of the likelihood and intensity/ severity of potential impacts originally scoped, including desktop research and review of:
 - a) Relevant studies and 'black' literature.
 - b) Socio-economic context at relevant scales.
 - c) Crime and safety context.
 - d) Cumulative impact context including historical development and concentration of relevant land uses.
 - e) Other relevant factors depending on the nature of the proposal or definition of locality.
- **Locational/spatial analysis**, including site visits and mapping to better understand the immediate and wider localities, including:
 - a) The presence of sensitive land uses or communities, including child care centres, public housing clusters and religious or educational institutions.
 - b) The service context, including proximity to relevant community facilities, retail and recreational opportunities.
 - c) Accessibility, including proximity to public transport, distances, topography and walkability.
 - d) Issues related to character and amenity - for example, compatibility of existing development, the parking environment, potential for privacy and acoustic impacts.
 - e) The CPTED environment as a further indicator of potential crime and safety impacts.
 - f) Other relevant factors, depending on the nature of the proposal and definition of locality.
- Development and implementation of appropriate **Community Consultation Strategy**, taking into account the nature of the proposal, the locality where impacts are most likely, a preliminary assessment of the nature and severity of likely impacts, including:
 - a) Clear understanding of the purpose of the consultation and the nature of the process.
 - b) Scope and extent of consultation.
 - c) Methods and resource required.

- d) Implementation process, including report back process, where appropriate.
 - e) Process for input to the proposal (i.e. can plan be changed? Proposal modified?).
- **Assessment** of the likely nature, extent and intensity/severity of impacts, including:
 - a) Synthesis of all above research.
 - b) Assessing reasonableness of community concerns or support.
 - c) Understanding and detailing distributional impact, including on sensitive land uses and vulnerable communities.
 - d) Identification of negative impacts that are mild, moderate or severe, and potential mitigations, taking into account community input.
 - e) Identify impacts likely to be moderate to severe that cannot readily be mitigated.

Overall assessment of the distribution of likely positive and negative impacts, including an opinion on the **balancing of these impacts** where possible but noting that this is ultimately the role of the decision maker

7. SIA TRIGGERS

- 7.1 Specific types of developments, or developments of a particular scale, require the preparation of either a Social Impact Comment (SIC) or a Comprehensive Social Impact Assessment (CSIA). As per the SIA Policy Guidelines the proposed applicant is required to refer to the guidelines in Appendix A to H. If a development proposal is consistent with one of the specific developments proposals identified in Table 1, the applicant is required to complete and submit a SIC at the minimum or a CSIA to Council for assessment. In addition to this list, Council reserves the right to require a SIA for any development for which it considers.

Table 1. Development Proposals	
Planning Instruments	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> • Any changes to strategic land use plans or master plans including land rezoning, unless deemed to be of minor impact to the community; • Planning or Planning & Transport Strategy units; • Any changes to the LEP which propose reclassification of community land to operational land; and • Major urban renewal projects.

Residential Development	<p>Application of development of, or major changes to:</p> <ul style="list-style-type: none"> • Residential flat buildings greater than 20 units and those that seek variation greater than 10% from the DCP / LEP density (height/FSR) controls; • Multi-dwelling housing that seek variation greater than 10% from the DCP / LEP density (height/FSR) controls; • Residential subdivision that seek variation greater than 10% from the DCP / LEP density (height/FSR) controls; • Housing, within the SEPP (Housing) 2021 including Affordable Housing (e.g., boarding houses) and Diverse Housing (e.g. Housing for seniors or people with a disability), – excluding secondary dwellings; • Any development that results in a reduction of affordable housing and mixed tenure; • Any development that results in a reduction of publicly accessible open and recreation space; • Caravan parks, manufactured home estate; and • Backpackers Accommodation
Commercial Development	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> • Packaged liquor outlets; • Hotels (bars, pubs, taverns), night clubs and registered clubs; • Cellar door premises; • Applications for liquor licenses and gaming machines; • Extension of trading hours for licensed premises; • Licensed public entertainment facility-cinema or theatre • Gambling outlets; • Restricted premises (e.g. sex shops); • Gun shops; • Entertainment facilities; • Amusement centres; • Function centers (greater than 100-persons capacity); • Commercial premises which include business premises, retail premises and office premises including tattoo parlors; • Animal training & boarding establishment; and • Veterinary hospital;
Sensitive Land Use	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> • Education establishments; • Child care centres; • Places of public worship (greater than 200 persons capacity); • Sex services premises (e.g. brothels); • Drug rehabilitation services—including methadone clinics and safe injecting rooms.

Other Types of Developments	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> • Health Services facilities (includes hospitals, medical centres, health consulting rooms, community health services) • Cemetery/Crematorium; • Mortuary; • Freight transport facilities; • Passenger transport facilities; • Helipad; • Airstrip; • Air transport facilities (includes airport & heliport); • Heavy Industry; • Waste or resource management facilities
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- 7.2 The Table below outlines activities initiated by Council or other external agencies (including the State Government) that will require an SIA, to be prepared by a Council staff member or externally commissioned and submitted to the respective Council department or external agency for assessment.

Table 2. Social Impact Assessment

Any new or changes to LEPs, DCPS, strategic land use plans or master plans including land rezoning, unless deemed to be of minor impact by Council's Community Development and Planning or Planning & Transport Strategy departments;
Any changes to the LEP which specifically propose reclassification of community land to operational land;
Major urban renewal projects;
Development of new or closure of Council-owned community facilities, including community centres, libraries, childcare centres and recreation facilities;
Development of Council policies that may impact the community; and
Policies, plans and projects by other government agencies that may have an impact on the community. These include but are not limited to metropolitan planning strategies, Aerotropolis land-use planning and associated infrastructure developments, relevant state environmental planning policies, state and federal plans, local health plans etc.

- 7.3 Modification to an approved development triggering Table 1, irrespective if an SIA has already been submitted in a previous stage of a related development, will require an SIA, considering cumulative and distributional impacts.
- 7.4 A proposal not listed in Table 1 must still consider and address the likely social impacts, as part of the Statement of Environmental Effects, in accordance with the EP&A Act 1979 Section 4.15, which will be reviewed by Council staff.
- 7.5 If a proposal not listed in Table 1 is deemed likely to have substantially more or less significant impacts – or likely to result in cumulative social impacts that are substantially more or less significant, Council reserves the right to request a social impact assessment.
- 7.6 The discretion to vary requirement for social impact assessment rests with the Director City Community and Culture and Director City Economy and Growth, with consideration of recommendations made by Council staff. Decisions will be made in

writing providing justification.

8. ASSESSMENT PROCESS

- 8.1 It is strongly recommended that applicants discuss the proposed approach to conduct an SIA or CSIA with Council officers prior to commencement. Information on the referral and assessment process can also be found in the SIA Guidelines in the Appendices of this policy.
- 8.2 In determining consent or refusal, Council needs to be satisfied that the identified social impacts of proposed developments, policies, plans or planning instruments have been appropriately addressed and respond to social justice principles. For reference, a copy of Council's Social Justice Policy can be found on Council's website.
- 8.3 Council officers will assess the SIA or CSIA submitted, undertaking a thorough assessment of all social impacts, evidence of community input and where required, clear impact mitigation measures that meet the criteria set out in section 6.
 - 8.3.1 At its discretion, Council may:
 - a) Seek independent expert advice about specific social impact issues relevant to planning proposals;
 - b) Obtain an independent external review of an applicant's SIA or CSIA; and
 - c) Commission its own SIA or CSIA.
 - 8.3.2 The developer as well as the Council is responsible for ensuring that the community is notified about a development and, for undertaking community consultation on the social impacts of a particular development. (Formal submissions can be made through Council's e-planning portal and Council's Community Participation Plan).
 - 8.3.3 For significant plans or proposals, Council may also consult through its online engagement portal and hold community feedback sessions. Depending on the nature of the proposed development, Council may also seek advice from relevant government agencies, i.e. NSW Health.
 - 8.3.4 After Council officers have made their assessment, they will either:
 - a) Recommend approval: This may involve appropriate consent conditions to ensure that any identified social impacts are managed in accordance with the policy. Council may request a social impact management plan in specific cases; and

- b) Recommend refusal: Refusals will be based on aspects of the development that are not appropriate for the site or wider area, do not comply with planning instruments and/or are inappropriate for other reasons identified in the assessment.

8.3.5 If the proposal is referred to Liverpool Local Planning Panel, Council will provide a copy of the SIA (and peer review, if undertaken) and any comments for review and consideration of the potential social impacts.

8.3.6 If a planning or development proposal is approved, then Council and the applicant will monitor the social impacts and conditions of consent. Some developments may have conditional consents for a period of time. Council may request a (Social Impact Management Plan) SIMP or a report on the commitments made by the developer.

9. LIQUOR AND GAMING MACHINE LICENSE APPLICATION

9.1 The determination of liquor and gaming machine license applications is made by the Liquor and Gaming NSW and the Independent Liquor and Gaming Authority (ILGA). Council recognizes its important role in reviewing and making comment on liquor license and gaming machine applications made to L&GNSW, which can affect the outcome of liquor licensing applications.

9.2 It is Council's responsibility under the EP&A 1979 and LGA 1993, to consider social impacts as part of the DA process for some premises where liquor will be sold and/or gaming machines will be introduced, including hotels, on-license premises and retail premises. Council assesses the social impacts arising from but not limited to design, location, trading hours, access, signage, fit out, acoustic treatments, the sale/consumption of alcohol and increased gambling at an outlet.

9.3 As a matter of routine, Council obtains each year the list of licensed premises within the LGA from the Department. This data is mapped on GIS and referred to when a DA for a licensed premise is received or Council is notified of a liquor license application.

10. MONITORING AND REVIEW

- 9.1 Council will continue to develop its in-house specialist knowledge to manage SIAs.
- 9.2 Council will continue to promote awareness of social impacts and the SIA process to applicants and the wider community.
- 9.3 Council will evaluate the impact of this Policy and SIA Guide every two years to identify further opportunities for improvement.

AUTHORISED

Council Resolution

EFFECTIVE FROM

13 March 2023

REVIEW DATE

March 2025

DEPARTMENT RESPONSIBLE

City Community and Culture (Community Development and Planning)

CONSULTATION

- City Economy and Growth (Development Assessment and Planning and Transport Strategy)
- City Corporate (Governance and Legal Services)

VERSION

	Adopted by	Changes made	Date	TRIM number
1	General Manager	None	3 April 2012	027483.2012
2	Council resolution	Complete review	26 August 2015	156452.2015
3	Council resolution	Complete review	May 2020	096668.2020
4	Council resolution	Complete review	October 2022	288252.2022

APPENDIX A

DEFINITIONS

Community-Any social group who could be affected by a proposed change or project including:

- a) Those who live nearby;
- b) Those who will hear, smell or see a development or its effects;
- c) Those who are forced to relocate;
- d) Those who have an interest in, or are likely to be affected by, the new project but may not live in close proximity; and
- e) Those who may normally use the land where the project is to be located.

Community Impact Statement (CIS) - Prepared by applicants as part of the liquor license application to the Office of Liquor and Gaming.

Cumulative Impacts-The total impact arising from a project, other activities (which may be under the control of others) and other background pressures and trends that may affect the outcome of a project. Analyzing incremental impacts of a project combined with the effects of other projects often give a more accurate understanding of potential outcomes and impacts.

Development Application (DA) - Submitted by applicants seeking consent to develop land within a local government area.

Development Control Plan (DCP)-Sets out the controls guiding development within a particular area.

Distributional Impacts –The differing impacts across people affected by a project. This means consideration needs to be given to an equitable final distribution of costs, benefits and impacts arising from a project.

Local Environment Plan (LEP) - Legal instrument that imposes standards to control development within a local government area.

Locality – Defining locality is critical for the assessments of social impacts, both positive and negative, and the identification of appropriate mitigations. Relevant case law has defined the scope of locality with reference to the nature of the proposal.

Local Impact Assessment (LIA) - Prepared by applicants as part of a gaming machine application to the Office of Liquor and Gaming.

Mitigation - A mitigation makes circumstances less harsh, takes the edge off an effect, reduces the impact of the effect, or lessens its seriousness or extent. In the context of social impact assessment, a mitigation measure is usually something additional to what is proposed rather than a change to the proposal.

Peer Review - An evaluation of scientific, academic, or professional work conducted by others working in the same field. In the context of this Policy, Council may commission an expert witness to review a submitted social impact assessment report and ask them to provide commentary, identify any issues and put forward recommendations. Peer reviews help to maintain the quality and integrity of SIA.

Precautionary Principle - Where there are threats or potential threats of serious social impact, lack of full certainty about those threats should not be used as a reason for approving the planned intervention or not requiring the implementation of mitigation measures and stringent monitoring.

Social Impacts-Social impacts are those which affect individuals and communities, the common or public good and/or the health and welfare of groups of people. Social impacts are not private interests and is considered as a change to one or more of the following concepts; people's way of life, culture, community, political systems, environment, health and wellbeing, personal and property rights, fears and aspirations.

Social Impact Assessment (SIA)-Process of assessing, monitoring and managing the intended and unintended social consequences, both positive and negative of planned interventions (projects, policies, programs etc.) and any social change processes invoked by those interventions. When undertaken as part of a DA process, an SIA is prepared to assist the relevant consent authority in its informed decision-making.

Social Impact Management Plans (SIMPs) - A management and monitoring tool to further identify, analyze and respond to social impacts that may arise during the lifecycle of a development. A more detailed explanation and Council's expectations are provided in appendix G.

Voluntary Planning Agreement (VPA)- A Voluntary Planning Agreement (VPA) is an agreement entered into by a planning authority and a developer. Under an agreement a developer agrees to provide or fund public amenities and public services, affordable housing and transport or other infrastructure.

APPENDIX B**SOCIAL IMPACT COMMENT INITIAL ASSESSMENT FORM****Instructions for completing this form:**

Applicants of developments where social impact comment is required must complete this form. Depending on the type of application, the application may need to provide detail analysis of the relevant parts. i.e. if the DA is intended to acquire liquor & gaming license, question 8 (crime & safety) should be focused. If it is housing related DA, the SIA should provide further details on question 2 (housing) analyzing local needs and impact assessment.

If it has been determined that a CSIA report is required, then it should be submitted with further details in all relevant components.

SOCIAL IMPACT COMMENT INITIAL ASSESSMENT FORM			
Applicant's details:		Owner's details (if different to applicant):	
Name		Name	
Postal address		Postal address	
Email		Email	
Phone	Mobile	Phone	Mobile
Proposal details:			
Lot number& Registered plan number			
Site address			
Brief description of development proposal			

1. Population change	
<p>Will the development result in significant change/s to the local area's population? (either permanently and/or temporarily)</p> <p>Explanation: Changes to the size, structure and capacity of the population can have significant implications for the provision and adequacy of community facilities, services, community cohesion and/or social sustainability. Scoping questions: Will the development result in a change to the age structure, household composition or permanence of the resident population? Will the development result in the displacement or current residents, visitors and/or workers?</p> <p>Refer to: Australian Bureau of Statistics and profile.id.com.au websites</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
2. Housing	
<p>Will the proposal increase or reduce the quantity, quality, mix, accessibility and/or affordability of housing?</p> <p>Explanation: A mix of housing types, sizes and costs is necessary for social diversity (in terms of age, family life cycles, income, cultural background) and social inclusiveness. Retention or expansion of affordable housing is necessary for social equity and to avoid displacement of individuals and families on lower incomes. Scoping questions: Will the development result in a mix of housing types and sizes? Will the development be appropriate to meet local needs and needs of special groups? Will the development result in the displacement of existing residents or alter the availability of affordable housing? Does neighboring design promote inclusion of different social groups and promote social interaction?</p> <p>Refer to: NSW Housing Strategy 2041 and Council's Homelessness Strategy & Action Plan. Council's Social Justice Policy 2018.</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below

3. Accessibility	
<p>Will the development improve or reduce physical access to and from places, spaces and transport?</p> <p>Explanation: 'Access for all' is an essential component of a fair and equitable society. Accessible developments encourage inclusive communities, improve affordability of goods and services, maximize access to public transport, pedestrian and cycle networks and provide convenient and continuous paths of travel (thereby promoting healthy, sustainable lifestyles).</p> <p>Consideration must also be given to accessibility for people with a disability Scoping questions: Will the proposal result in the group of the community being excluded or having limited in their access? Will someone with reduced mobility have trouble accessing and/or moving around this proposed development?</p> <p>Refer to: Australia's National Disability Strategy 2021-2031, NSW Disability Inclusion Act 2014& Council's Disability Inclusion Action Plan 2017-2021.</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
4. Community and Recreation Services/ Facilities	
<p>Will the development increase, decrease or change the demand or need for community, cultural and recreation services and facilities?</p> <p>Explanation: Access to diverse and adequate community and recreation services and facilities is necessary for physical and mental health, well-being, personal productivity, social cohesion and social sustainability. Examples of facilities include community centers, leisure centers, recreation centers, sports fields and playgrounds.</p> <p>Scoping questions: Will the development ensure public access to the public domain? Will the development enhance sense of belongings and cultural association making people feel valued and contributing strong community& good health?</p> <p>Refer to: Council's Recreation, Open Space and Sports Strategy 2018-2028.</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below

5. Cultural and Community Significance	
<p>Will the development impact on any items or places of cultural or community significance?</p> <p><i>Explanation: There may be certain places, items or qualities that are culturally valuable or significant to the community. They provide significant meanings and reference points for individuals and groups. This may include specific sites of Aboriginal significance. The acknowledgement and protection of these places, items or qualities is a key element in building strong and resilient communities.</i></p> <p><i>Scoping questions: Will the development ensure public access to the public domain? Will the development enhance sense of belongings and cultural association making people feel valued and contributing strong community & good health?</i></p> <p><i>Refer to: Council's Recreation, Open Space and Sports Strategy 2018-2028.</i></p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
6. Community Identity and Sense of Belonging	
<p>Will the development strengthen or threaten opportunities, social cohesion and integration within and between communities?</p> <p><i>Explanation: Social cohesion and integration requires places and spaces for informal and safe social interaction. Developments can increase or decrease these interaction opportunities through their provision (or otherwise) of safe and connected pathways and linkages and attractive gathering places (town centres, parks, squares / plazas, civic spaces and streets)</i></p> <p><i>Consideration should be given to incorporating principles of good urban design into the development proposal. Scoping questions: Will the proposal encourage opportunities for informal interaction?</i></p> <p><i>Refer to the Creating Places for People: An Urban Design Protocol for Australian Cities, Federal government's Urban Design website. Better Placed-Government Architect NSW, Liverpool City Centre Public Domain Master Plan.</i></p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below

7. Health and Well-being	
<p>Will the development strengthen or threaten opportunities for healthy lifestyles, healthy pursuits, physical activity and other forms of leisure activity?</p> <p>Explanation: Developments can increase or decrease opportunities for healthy lifestyles through improving or reducing the livability of places (due to things such as safety, noise, dust, aesthetics) or increasing or decreasing opportunities for:</p> <ul style="list-style-type: none"> • Walking, cycling, play and other physical activities; • Healthy food choices; and • Drinking, gambling and smoking <p>Consideration should be given to incorporating healthy urban design principles into the development proposal. Urban heat is a growing concern in SW Sydney which can lead to poor health and social outcomes. In addition to heat-related issues, it can lead to an over-reliance on air-conditioning. Scoping questions: Does the development has a potential to promote healthy lifestyle and livability of community? Will the development alter or contribute to the neighborhood's walkability and connectivity? Will the proposal support active transport options? Does the density proposed match the walkability of the neighborhood? Will the proposal have a positive or negative impact on urban heat and peoples options for coping with urban heat? How can any negative impacts be mitigated?</p> <p>Refer to: Healthy Built Environment Checklist in NSW Health website.</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
8. Crime and Safety	
<p>Will the development increase or reduce public safety and opportunities for crime (perceived or actual crime)?</p> <p>Explanation: Developments can increase or decrease perceived and actual safety. For example, through generating increased traffic, providing venues that may attract unruly behavior. This can diminish social cohesion and integration however impacts can be mitigated by appropriate design, traffic controls and management.</p> <p>Safer by Design principles should be considered in the development proposal. Good design aims to reduce the opportunities of crime and its supportive to the safety of the community. Scoping questions: Does the proposal have the potential to change the way people feel about their safety in the community? Have appropriate surveillance technologies been proposed? Is adequate lighting proposed to ensure safe nighttime use?</p> <p>Refer to: Council's Community Safety and Crime Prevention Strategy. Also, Crime Prevention Through Environmental Design (CPTED) Guidelines, NSW Police website</p>	
Yes	If yes, briefly describe the impacts below

No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
9. Local Economy and Employment Opportunities	
<p>Will the development increase or reduce the quantity and/or diversity of local employment opportunities? (Temporary or permanent)</p> <p>Explanation: Unemployment and low income are associated with poor health and reduced social inclusiveness and resilience. Accessible and diverse local jobs (suited to the capacities of local populations) reduce the risk of unemployment (and the associated poorer health and social sustainability outcomes). Affordable travel expenses and local employment can support social equality & diversity.</p> <p>Scoping questions: Will employment and education be readily accessible from the development? Will the development alter the number or diversity of jobs available for the local community?</p> <p>Refer to: Council's Economic Development Strategy 2019-2029, Employment Strategy-Local Jobs for Local People.</p>	
Yes	If yes, briefly describe the impacts below
No	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
10. Supporting Diverse Communities and Needs of Specific Population Groups	
<p>Will the development increase or decrease inclusive opportunities (social, cultural, recreational employment, governance) for groups in the community with special needs?</p> <p>Explanation: Council has a Social Justice Policy, which promotes access to life opportunities (e.g. jobs, education, full participation in the cultural life of the community) and inclusiveness for all (including those with special needs – young people, aged population, CALD communities, Aboriginal community, people with a disability, children and women). Developments can increase inclusiveness through the provision of culturally appropriate facility design and programs, and the avoidance of communication barriers.</p> <p>Refer to: Children and Young Persons (Care and Protection) Act 1998 No 157-NSW Legislation, Council's Community Strategic Plan, Growing Liverpool 2023, Social Justice Policy, Child Safe Policy, LEAPS Multicultural Plan, Youth Strategy and Disability Inclusion Action Plan.</p>	
	If yes, briefly describe the impacts below

Yes	Describe your proposed mitigations of negative impacts or enhancements of positive impacts below
No	

APPENDIX C

COMMON SOCIAL IMPACT TYPES

There are a wide range of potential social impacts associated with different types of development. Some social impacts are typical of particular types of development—as summarized in the tables below. Table B1 provides examples of impacts for particular types of development requiring a Social Impact Comment and Table B2 provides lists examples of impacts for the types of development requiring a Comprehensive Social Impact Assessment. These tables are not exhaustive however they provide an initial point of consideration for applicants in what Council expects to be included in a social impact assessment.

Table B1: Common social impact types with Social Impact Comment			
Development type	Specific Development Proposal	Social Aspect	Potential Impacts
Residential Development	Applications for development of, or major changes to: <ul style="list-style-type: none"> Residential flat buildings greater than 20 units Multi-dwelling housing greater than 20 dwellings Residential subdivision greater than 20 dwellings Housing within the <i>SEPP (Housing) 2021</i> including Affordable Housing (e.g. boarding house) and Diverse Housing (e.g. Housing for seniors or people with a disability), excluding secondary dwellings including caravan parks and backpacker's accommodation) 	<ul style="list-style-type: none"> Accommodation 	<ul style="list-style-type: none"> Housing choice Displacement Loss of affordable housing Creation of affordable housing Amenity impacts

Commercial Development	<ul style="list-style-type: none"> • Entertainment facilities • Amusement centers and Function centers (greater than 100-persons capacity) • Commercial premises which includes business premises, retail premises and office premises, including tattoo parlors • Animal training & boarding establishments • Veterinary hospital 	<ul style="list-style-type: none"> • Accessibility health and wellbeing 	<ul style="list-style-type: none"> • Access to services and facilities • Access to public transportation • Accessibility for people with disabilities or mobility issues • Access to fresh food and local produce • Ageing in place • Familiarity with neighborhood • Improved community participation opportunities • Recreation opportunities • Relaxation and sleep provision of open space in the immediate area (private and communal)
		<ul style="list-style-type: none"> • Crime and Safety 	<ul style="list-style-type: none"> • Clear and accessible path to travel to shops and transport options • Community cohesion and familiarity • Domestic violence • Population clustering • Substance consumption or abuse • Public violence

			<ul style="list-style-type: none"> Usability of streets or outdoor space Lay-out of master plan to ensure CPTED principles are met
		<ul style="list-style-type: none"> Population Change 	<ul style="list-style-type: none"> Significant population change (size and characteristics) Change in population density
		<ul style="list-style-type: none"> Community Identity and a sense of belonging 	<ul style="list-style-type: none"> Sense of belonging or being unwelcome Access to services and facilities Exclusion Ownership Familiarity with neighborhood Perception of danger Improved community
Other Types of Development	<ul style="list-style-type: none"> Childcare center (more than 20 places) Places of Public Worship (greater than 200 persons capacity) Educational establishments Health consulting rooms Council-owned & private Community facilities including 	<ul style="list-style-type: none"> Accessibility health and wellbeing 	<ul style="list-style-type: none"> Access to services and facilities Familiarity with neighborhood Improved community participation opportunities

	community centres, libraries, youth centers and recreation facilities (greater than 100 persons capacity), Community land, as classified by the Local Government Act1 993		<ul style="list-style-type: none"> • Recreation • Relaxation and sleep patterns • Accessibility of building for disabled persons or people with mobility issues • Access to transport options • Parking
		• Crime and Safety	<ul style="list-style-type: none"> • Graffiti • Vandalism and property damage • Offensive language and behavior • Public violence • Safety of young people • Substance consumption or abuse • Theft on street, from cars, business or homes
		• Community Identity and a sense of belonging	<ul style="list-style-type: none"> • Diversity • Inclusion/ Exclusion • Improved community participation opportunities • Sense of belonging or being unwelcome

		<ul style="list-style-type: none"> • Cultural and community significance 	<ul style="list-style-type: none"> • Respect for culture and significant places
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Table B2: Common social impact types–Comprehensive Social Impact Assessment			
Development type	Specific Development Proposal	Social Aspect	Potential Impacts
Residential Development	Applications for development of, or major changes to: <ul style="list-style-type: none"> • Residential flat buildings greater than 100 units • Development that results in a reduction of affordable housing 	<ul style="list-style-type: none"> • Accommodation 	<ul style="list-style-type: none"> • Housing choice • Displacement • Loss of affordable housing
		<ul style="list-style-type: none"> • Accessibility 	<ul style="list-style-type: none"> • Access to services and facilities • Access to public transport options • Accessibility for people with disabilities or mobility issues
		<ul style="list-style-type: none"> • Health and wellbeing 	<ul style="list-style-type: none"> • Ageing in place • Familiarity with neighborhood • Improved community participation opportunities • Recreation opportunities • Relaxation and sleep • Provision of open space in the immediate area (private and communal)
		<ul style="list-style-type: none"> • Crime and safety 	<ul style="list-style-type: none"> • Clear and accessible path to travel to

			shops and transport options <ul style="list-style-type: none"> • Community cohesion and familiarity • Domestic violence • Population clustering • Substance consumption or abuse • Public violence • Usability of streets or outdoor space • Lay-out of Master Plan to ensure CPTED principles are met
		<ul style="list-style-type: none"> • Population change 	<ul style="list-style-type: none"> • Significant population change (size and characteristics) • Change in population density
		<ul style="list-style-type: none"> • Community identity and sense of belonging 	<ul style="list-style-type: none"> • Exclusion • Familiarity with neighborhood • Ownership • Perception of danger • Improved community participation opportunities • Sense of belonging being unwelcome

Commercial Development	<p>Applications for development of, or major changes to:</p> <ul style="list-style-type: none"> • Packaged liquor outlets • Hotels (bars, pubs, taverns), nightclubs and registered clubs • Cellar Door Premises • Licensed public entertainment facility-Cinema or theatre • Extension of trading hours for licensed premises* • Gaming outlets • Restricted premises (e.g. sex shops) • Sex services premises (e.g. brothels) • Gun shops 	<ul style="list-style-type: none"> • Health and wellbeing 	<ul style="list-style-type: none"> • Access to services and facilities • Familiarity with neighborhood • Interaction and quality of social relationships • Recreation • Noise and activity (particularly late at night) • Smoking near residential properties
		<ul style="list-style-type: none"> • Crime and safety 	<ul style="list-style-type: none"> • Graffiti • Vandalism & property damage • Littering • Offensive language behavior • Public violence/assault. • Substance consumption and abuse • Theft • Usability of streets and outdoor spaces • Noise and activity (particularly late at night) • Safety of workers (safe work practices) • Safety of patrons • Substance consumption and abuse

			<ul style="list-style-type: none"> Public violence
		<ul style="list-style-type: none"> Local Economy 	<ul style="list-style-type: none"> Contribution to local economy Employment opportunities Access to entertainment options for young people
		<ul style="list-style-type: none"> Accessibility 	<ul style="list-style-type: none"> Access to goods, services and facilities Affordability and choice Access to public transport (bus stops and train stations) – Connectivity Interaction and quality of social relationships for residents
Other types of development	Applications for development of, or major changes to: <ul style="list-style-type: none"> Freight transport facilities Passenger transport facilities Helipad Airstrip Air transport Facilities (includes airport & heliport) Waste or resource Management facilities Heavy industry Cemetery/ Crematorium Mortuary 	<ul style="list-style-type: none"> Health and Wellbeing Crime and safety 	<ul style="list-style-type: none"> Noise and activity Relaxation and sleep Pedestrian access
		<ul style="list-style-type: none"> Local economy and employment opportunities 	<ul style="list-style-type: none"> Contribution to local economy Employment opportunities Property values

Community Health and Safety	Applications for development of, or major changes to: <ul style="list-style-type: none"> • Drug rehabilitation Service including methadone clinics and safe injecting rooms • Hospitals, medical centers & community health services 	<ul style="list-style-type: none"> • Health and wellbeing 	<ul style="list-style-type: none"> • Access to services and facilities • Improved community participation opportunities
		<ul style="list-style-type: none"> • Accessibility 	<ul style="list-style-type: none"> • Accessibility of building for disabled persons or people with mobility issues • Access to transport options • Parking

		<ul style="list-style-type: none"> • Crime and safety 	<ul style="list-style-type: none"> • Graffiti • Vandalism and property damage • Offensive language and behavior • Public violence • Safety of young people • Substance consumption or abuse • Theft-on street, from cars, business or homes
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APPENDIX D**Community Consultation Methods and Options**

The overriding principle in community participation is to ensure people have the opportunity and the information to influence decisions that might affect them. Effective community participation requires time and commitment and a proactive approach to the less articulate groups and individuals in the community. Involving the community is one of the keys to increasing the extent that the development benefits local communities whilst ensuring the negative impacts on people are minimized.

It is recognized that the nature and extent of consultation will be highly contextual, and the substantial resources required may not be warranted in smaller, low impact developments.

Who is The Affected Community
Those who live nearby
Those who will hear, smell or see a development or its effects
Those who are forced to relocate
Those who have an interest in the new project but may not live in close proximity
Those who may normally use the land where the project is to be located
Effective Communication
Notify people early
Listen carefully and absorb the information
Allocate sufficient staff resources to conduct the consultation
Cultivate community networks or use informal channels
Be sensitive to cultural aspects and differences
Supply and ensure easy access to information (Translate and interpret information or use advisers to explain technical issues in plain English)
Seek agreement about the process of consultation and encourage open and full discussion
Develop skills in group facilitation and conflict resolution
Be independent

Useful Community Consultation Resources

Below is a list of resources that may assist with consulting and engaging with a communities:

- Community and Stakeholder Engagement, *Environmental Impact Assessment Guidance Series, NSW Department of Planning and Environment, 2017*
- Community Engagement Toolkit
<https://www.communityplanningtoolkit.org/sites/default/files/Engagement.pdf>
- Guide to Better Regulation– Consultation Policy, 2008 *NSW Department of Premier and Cabinet*
- Health Impact Assessment: A Practical Guide, 2007 *Centre for Health Equity Training, Research and Evaluation*
- Community Engagement in the NSW Planning System, 2003 *Planning NSW*
- Ideas for Community Consultation, a report prepared for the Department of Urban Affairs and Planning

Techniques to Consult with the Community

Technique	Objective	Affected Community			
		Neighbors	Local Street	Local Stakeholder Groups	Wider Community Groups
Letters	Informing the community		✓	✓	✓
Brochures/Fact Sheets			✓	✓	✓
Media Release		✓			✓
Signage on Land		✓			
Displays on Notice Boards			✓	✓	✓
Questionnaires	Informing the community and obtaining specific feedback		✓	✓	✓
Discussions with adjoining property owners	Information exchange and community involvement while Obtaining feedback				

Technique	Objective	Affected Community			
		Neighbors	Local Street	Local Stakeholder Groups	Wider Community Groups
Social Media	Information exchange and community involvement while obtaining feedback	✓		✓	✓
Street meeting		✓	✓		
Community meeting		✓	✓	✓	✓
Personal interviews		✓			✓
Workshops	Information exchange Raising awareness Involving the affected community Obtaining specific and broad feedback	✓	✓	✓	✓
Community advisory committees	Information exchange Raising awareness Involving the affected community Building support obtaining feedback on a wide range of issues	✓	✓	✓	✓

APPENDIX E**Determining Levels of Impact Significance**

Assessment criteria	Neutral (neither positive or negative)	Minor Impact (positive or negative)	Moderate Impact (positive or negative)	Significant Impact (positive or negative)
Degree of change likely to arise from development	Insignificant/ No change	Some change, low significance	Some change, moderate significance	High level of change
The number and nature of people affected	None	Immediate neighbors only (small number)	Suburb level impact (100+ people)	LGA wide impact, substantial impact on a large number of people / groups
Director indirect impact	No impact	Indirect impact	Some direct impact	Direct impact
Duration of impact	N/A	During construction phase only	1-12months	12months or more
Community perception that development will cause significant negative social impacts	None	Low level of reaction from the people affected	Moderate level of reaction from the people affected and/or wider community	High level reaction from the people affected and/or wider community
Potential cumulative impacts	Insignificant/ Low	Low likelihood of increase in overall impacts in the locality	Moderate likelihood of increase in overall impact of the locality	High likelihood of increase in overall impacts in the locality
Outcome	No Action Required	Complete Social Impact Comment Initial Assessment	Complete Comprehensive Social Impact Assessment	

APPENDIX F**Competency Requirements for Undertaking Social Impact Assessment**

The Social Impact Assessment Policy requires that any social impact assessment must be conducted by “a professional in the social sciences field who has experience preparing and applying social impact assessment.” The following checklist can be used to determine whether or not a consultant is appropriately qualified to complete a SIC or CSIA for submission to Liverpool City Council.

- Does the consultant have qualifications and/or substantial field experience in the relevant technical area?
E.g. Qualifications in social science, human geography, urban or social planning –or referees (in the profession or within Government) who can validate the relevant experience within the social impact assessment field.
- Does the consultant have a good reputation in relation to the relevant work?
E.g. Referees within the profession or Government who can confirm this.
- Does the consultant use best practice methodologies in data gathering, community consultation and data analysis?
E.g. such as those methods specified in these guidelines and by the International Association for Impact Assessment.
- Does the consultant have experience preparing social impact assessments for local councils?
E.g. can the consultant provide evidence of relevant experience?
- Does the consultant have a conflict of interest or a financial interest in the project?

Standards for Comprehensive Social Impact Assessment

Impact assessment is an important part of planning and decision-making processes and as such social impact assessment should be given as much consideration as environmental or economic impact assessment.

In accordance with the Planning Institute of Australia's Social Impact Position Statement, Council expects that a comprehensive social impact assessment, submitted to Council, to meet the following criteria:

Standards for Comprehensive Social Impact Assessment

The process is undertaken by a competent, professional social scientist and uses rigorous social science methodologies

The process includes effective, timely and transparent public involvement

The baseline(pre-change) situation is adequately researched and documented

The scope of proposed changes is fully described

Examples of similar changes are identified, including impacts likely to affect minority groups, different age, income and cultural groups and future generations

Direct as well as indirect, long term and short term, positive and negative, passing and accumulating impacts are identified

The relative equity of impacts is identified. It is important to identify how the benefits and losses will be distributed to different sections of the community

Impacts over time and location are considered (e.g., local as opposed to state and national benefits and losses)

Impacts which are not amenable to precise measurement are not excluded from consideration—the assessment is an evaluation not a proof

A review mechanism is included where appropriate

The precautionary principle is applied in making an assessment

Adapted from Planning institute of Australia's Social Impact Position Statement

The following additional criteria apply:

- a. The size of the document should be commensurate with the number and sign of the social issues likely to eventuate.
- b. Size of document will not be regarded as an indicator of its accuracy, adequacy or completeness.
- b. All SIAs of more than 10 pages are required to contain an executive summary of not more than 1000 words.

APPENDIX G**Social Impact Management Plan (SIMP)**

The Social Impact Management Plan's purpose is to further analyze potential adverse impacts identified by the SIA process and to ensure that the needs and conditions of people affected by a proposed project are fully taken into account in project design/delivery and that suitable mitigation measures are provided as needed. It should also contribute to enhancing opportunities for developmental benefits for affected groups.

For each significant social impact an appropriate mitigation strategy must be developed, delivered and reported on for Council's information. First, all available options should be sought to avoid impacts (e.g., through adjustment of project design, modification of protected area boundaries). If avoidance is not possible, appropriate measures to minimize the impact should be identified. Where avoidance is not possible or negative residual impacts remain after minimizing, the SIA or SIMP should propose methods of adequately compensating affected groups for their losses over the time of the project.

Compensation mechanisms must be developed in consultation with legitimate representatives of Council and affected groups and designed in a way that they are socio-economically and culturally suitable, considering a range of options for in-kind, non-monetary and monetary compensation, as appropriate. The SIA and/or the SIMP could also explore opportunities for social enhancement. This might include:

- Opportunities to enhance the participation of men and women in the project and how to support both genders in the development of sustainable livelihood activities and in deriving social and economic benefits from the project, or
- Measures to enhance social inclusion and cohesion; to address vulnerability, capacity and equity issues; to empower weak, poor and marginalized social groups; and to enhance safety and security.

It is required to briefly describe each mitigation measure including the type of impact(s) it will address, its design, and operating procedures, as appropriate. Proposed mitigation measures should be technically and operationally feasible and culturally adequate. The benefits of measures should be distributed in an equitable manner across the affected population when the measure is a generalized action. Specify institutional arrangements and any needs for development of the capacity of communities or partners to implement the proposed measures.

The measures should be presented in a Social Impact Management Plan to demonstrate and facilitate their integration into project management. This includes confirming their feasibility, indicating resources and costs, responsibilities, their schedule for implementation, and evidence of completion.

APPENDIX H**Data Resources**

In addition to relevant studies and literature, the following data sources are provided:

- Liverpool Local Government;
- State Government Agencies; and
- Federal Government Agencies.

Liverpool Local Government Area (LGA) www.liverpool.nsw.gov.au	
Source	Data available
Community Profile(Profile.id)	<p>Liverpool's key demographics:</p> <ul style="list-style-type: none"> • How many people live here? • Who are we? • What do we do? • How do we live?
Social Atlas(Atlas.id)	Thematic maps (as above)
Liverpool City Council website www.liverpool.nsw.gov.au	<ul style="list-style-type: none"> • Council's 10-year community strategic plan • Growing Liverpool 2023 • Annual reports • Other documents and publications e.g. Youth Strategy
Consultations or research reports	<p>Local community organizations may have reports containing relevant community consultation outcomes and research, such as:</p> <ul style="list-style-type: none"> • Anglicare • Kari Aboriginal Resources • Liverpool Migrant Resource Centre • Liverpool Neighborhood Connections • Southwest Child, Adolescent & Family Services

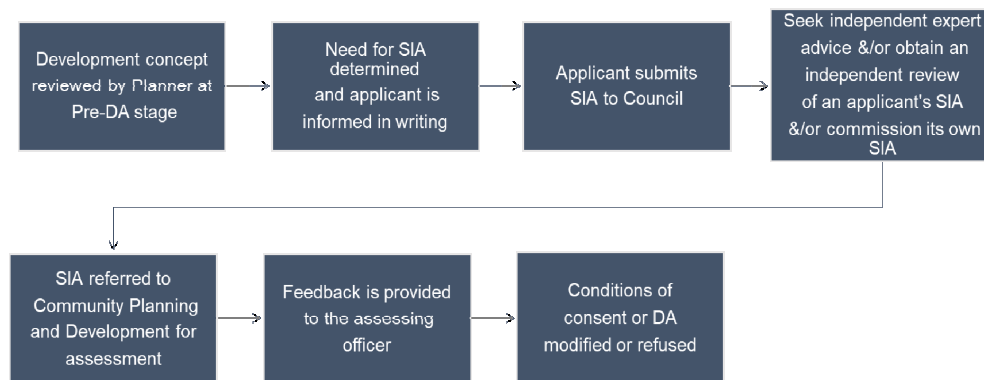
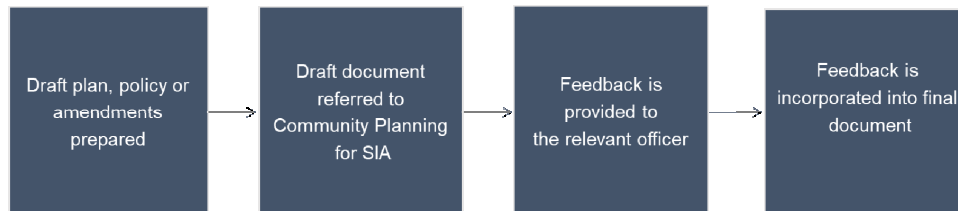
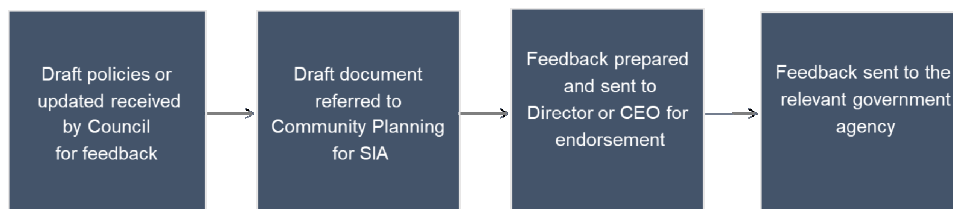
State Government Agencies www.nsw.gov.au	
Source	Data available
NSW Bureau of Crime Statistics And Research http://www.bocsar.nsw.gov.au	Crime statistics for NSW and LGAs. Specialist crime data and comparative trend analysis
NSW Police Force www.police.nsw.gov.au	<ul style="list-style-type: none"> • Mapped crime data by local area commands (available through local police stations) • Crime statistics • Annual customer satisfaction surveys (levels of reporting and police response)
Department of Family and Community Services www.community.nsw.gov.au	<ul style="list-style-type: none"> • Supported accommodation information • Child abuse and domestic violence statistics
NSW Government Licensing Service (GLS)	<ul style="list-style-type: none"> • Childcare license information
Department of Family and Community Services – Housing NSW www.housing.nsw.gov.au	<ul style="list-style-type: none"> • Waiting list numbers • Client profile • Housing stock Information • Quarterly rent and sales reports
Department of Education and Communities www.dec.nsw.gov.au	<ul style="list-style-type: none"> • Enrolments in government and private schools • Enrolment of special groups (Aboriginal and Torres Strait Islanders; Non-English Speaking Background students)
NSW Fair Trading www.fairtrading.nsw.gov.au	<ul style="list-style-type: none"> • Boarding house data • Rental Bond Board data (rents, type of dwellings)
Bureau of Transport Statistics www.bts.nsw.gov.au	<ul style="list-style-type: none"> • Passenger travel for all modes of transport (by traffic zones and statistical local areas) • Freight movement survey • Journey to work data

	<ul style="list-style-type: none"> Information on future road and public transport networks
Department of Planning & Environment www.planning.nsw.gov.au	<ul style="list-style-type: none"> Population projections (LGA and regions) NSW Household and Dwelling Projections Data Demographic trend analysis Urban Development Program (UDP) production data – new release areas Metropolitan Urban Development Program (MUDP) production data – established areas Employment Lands Development Program data Regional housing statistics and market analysis
NSW Health www.health.nsw.gov.au	<ul style="list-style-type: none"> In-patient statistics Community health data Hospital facility data Waiting list information Range of health indicators (e.g. mortality data) Alcohol and drug dependency data
SW Lands & Property Information www.lpi.nsw.gov.au	<ul style="list-style-type: none"> Land title registration Property information Valuation Surveying Mapping
NSW Spatial Data Catalogue (NSDC) www.sdi.nsw.gov.au	<ul style="list-style-type: none"> Central repository for the publication of metadata describing NSW Local and State Government spatial data Search for data, find out what data exists, where and how to access the data, the data's fitness for purpose, who/when and how the data was created, how often it is updated, the geographic extent of the dataset, as well as the rights and restrictions that apply to the dataset.

Federal Government Agencies www.australia.gov.au	
Source	Data available
Australian Bureau of Statistics (ABS) www.abs.gov.au	Census data (demographic, employment, housing) <ul style="list-style-type: none"> • Manufacturing and retail censuses • Building and construction data • Social trends data • Disability data • Victims of crime survey • Health data • Tourism data
Department of Employment Labor Market Information Portal www.lmip.gov.au	<ul style="list-style-type: none"> • Centrelink customer population by main allowance type • Job Services Australia data • Employment Industries and Occupations by area • Unemployment rates • Labor force data
Department of Immigration and Border Protection www.immi.gov.au	Statistics on permanent settlers to Australia by visa category using the Settlement Database

APPENDIX I**Social Impact Comment or Comprehensive Social Impact Assessment Referral Process**

Below is the referral process by which development applications, internal policies and external policies are reviewed and assessed by Council.

Rezoning/Development Application Referral Process**Internal Policy and Plan Referral Process****External Government Policy and Plan Referral Process**

PLAN 03

**Completion of VPA-44 Planning Agreement - 5
Melito Court, Prestons**

Strategic Objective	Visionary, Leading, Responsible Ensure Council is accountable and financially sustainable through the strategic management of assets and resources
File Ref	332952.2023
Report By	Yee Lian - Contributions Planning Officer
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

The purpose of this report is to inform Council that Planning Agreement VPA-44, 5 Melito Court, Prestons is now deemed as complete, with confirmation of the Developer's obligations completed by payment of a monetary contribution to Council on the 24 January 2023. This report is to formalise and deem VPA-44 as complete via council resolution.

RECOMMENDATION

That Council:

1. Deem Voluntary Planning Agreement, VPA-44, 5 Melito Court Prestons as complete with no outstanding obligations; and
2. Support the removal of VPA 44 from title.

REPORT

VPA-44 Planning Agreement – 5 Melito Court, Prestons

On 17 December 2021 DA-1060/2020 was approved and conditions were imposed under Condition 138, 139 and 143 that required Tap III Prestons Pty Ltd (Developer) to carry out works for an intersection upgrade located at the Bernera Road/Yarunga Street/Yato Road intersection.

On 5 April 2022 the Developer sent a letter of offer to Council for consideration. The offer sought a modification to DA-1060/2020 that would impose a condition to pay a monetary contribution under a Planning Agreement in lieu of carrying out works for an intersection upgrade required under Condition 138, 139 and 143 of the Notice of Determination.

The offer was considered and a Draft Planning Agreement was prepared. On 31 August 2022, Council resolved for the Draft Planning Agreement (VPA-44) to be publicly exhibited for a minimum period of 28 days. The exhibition commenced on the 5 September 2022 and ended 3 October 2022, with no public submissions received during that period.

After the exhibition, VPA-44 was formally executed on the 23 December 2022. On 6 February 2023 Council approved modification DA-1060/2020/A that modified Condition 138, and deleted conditions 139 and 143.

Current Status

The VPA only required the payment of Monetary Contribution towards the intersection upgrade and did not exclude 7.11 contribution payments. The monetary contributions and 7.11 contributions were paid by the Developer on the 24 January 2023, and the payment has already been audited and acquitted in the 2022/23 financial year.

Given there are no more outstanding obligations under the agreement to be delivered by the Developer it is recommended for Council to formally determine VPA-44 as complete and allow the VPA to be removed from Title.

Next Steps:

- Following Council resolution, Council Officers will notify the Developer via correspondence.
- The Contributions Planning team will advise the Infrastructure planning team that funding has been received to assist with programming and delivering the works.

FINANCIAL IMPLICATIONS

Monetary Contributions (\$387,600.00) can only be allocated towards the intersection upgrade located at Bernera Road/Yarunga Street/Yato Road intersection. These funds are to be held in a restricted account until such time as the works are scheduled and allocated within the operational plan for delivery.

CONSIDERATIONS

Economic	Deliver a high quality local road system including provision and maintenance of infrastructure and management of traffic issues.
Environment	Support the delivery of a range of transport options.
Social	There are no social and cultural considerations.
Civic Leadership	There are no civic leadership and governance considerations.
Legislative	Include any relevant legislation and section here. There are no legislative considerations relating to this report.
Risk	There is no risk associated with this report.

ATTACHMENTS

1. Receipt TAP III Prestons Pty Ltd RN 5473489 \$387,600.00 24 January 2023

LIVERPOOL CITY COUNCIL
ADMINISTRATION CENTRE
33 MOORE STREET LIVERPOOL
LOCKED BAG 7064 LIVERPOOL BC 1871
TELEPHONE 1300 36 2170
ABN: 84 181 182 471

RECEIPT

TAP III PRESTONS PTY LTD
C/- INDEV CONSULTING PTY LTD
PO BOX 858
WILLOUGHBY NSW 2068

DUPLICATE RECEIPT

DATE 24-JAN-2023 RECEIPT NO 5473489
TIME 11:23:02 CASHIER Dia

APP/44///VPA
AP 387,600.00

5 MELITO COURT PRESTONS

DIRECT BANK -387,600.00

TOTAL AMOUNT 387,600.00

AMOUNT TENDERED 387,600.00

ROUNDING

RECEIPT ISSUED SUBJECT TO
CHEQUES BEING CLEARED BY BANK

MERCHANT SERVICE FEE APPLIES
TO ALL CREDIT CARD PAYMENTS

CHIEF EXECUTIVE OFFICER

PLAN 04	Minor Amendment to LLEP 2008 - 15 Stante Close and 430 Cowpasture Road, Middleton Grange
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Strategic Objective	Liveable, Sustainable, Resilient Deliver effective and efficient planning and high-quality design to provide best outcomes for a growing city
File Ref	334271.2023
Report By	Nancy-Leigh Norris - Executive Planner
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

A minor amendment to the *Liverpool Local Environmental Plan 2008* (LLEP 2008) is proposed at 15 Stante Close (Lot 34 DP 1044841) and 430 Cowpasture Road (Lot 257 DP 2475), Middleton Grange.

The subject sites currently contain both the RE1 Public Recreation and RE2 Private Recreation zones under the LLEP 2008. It is proposed that 15 Stante Close (owned by the Serbian Cultural Club, outlined in red below) is zoned RE2 Private Recreation, and 430 Cowpasture Road (owned by Liverpool City Council, outlined in blue below) is zoned RE1 Public Recreation.

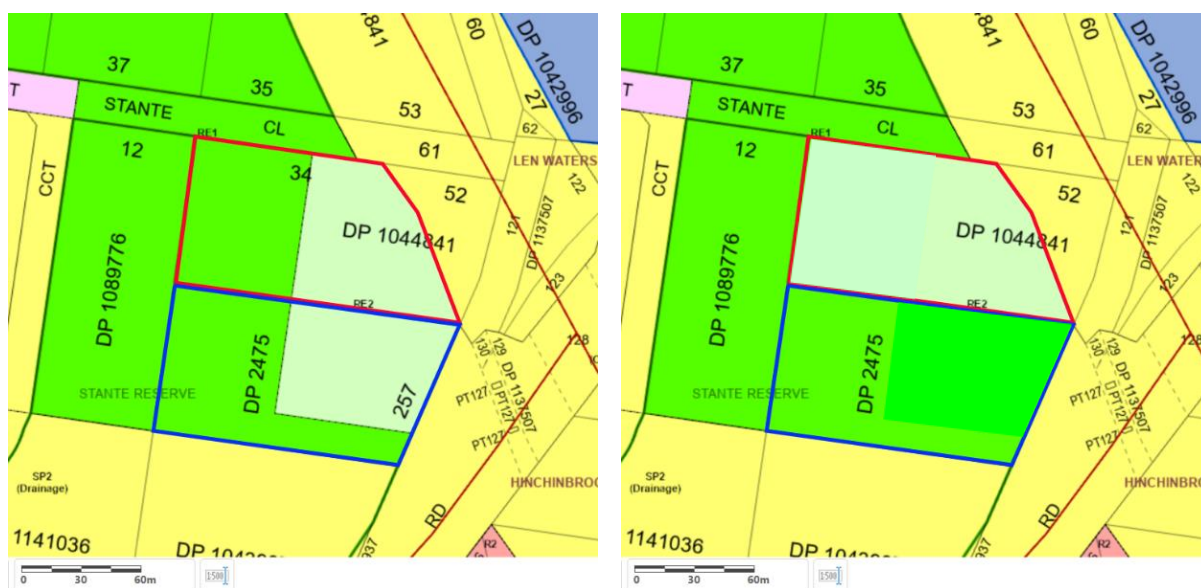


Image 1: Existing (left) and Proposed (right) Land Use Zones under LLEP 2008

The current land use zones within the LLEP 2008 reflect the original intended outcome for these sites, which involved a land swap between Liverpool City Council and the Serbian Cultural Club. However, the land swap did not occur, and Council developed the whole of 430 Cowpasture Road, Middleton Grange for public recreation purposes. Therefore, the RE1 Public Recreation zoned land at the rear of 15 Stante Close is no longer required.

A Section 3.22 amendment (under the *Environmental Planning & Assessment Act 1979*) allows for minor amendments to the LLEP 2008 to occur without the need for a planning proposal. On 21 July 2023, Council contacted the Department of Planning and Environment (DPE) seeking advice whether a 3.22 amendment would be supported (**Attachment 1**). A response has not been received from DPE, however it is recommended to proceed with the lodgement of a s3.22 amendment for this site.

RECOMMENDATION

That Council:

1. Receive and note this report.
2. Submit a s3.22 amendment request to the Department of Planning and Environment, to amend the land use zone and development standards at 15 Stante Close and 430 Cowpasture Road, Middleton Grange, as per this report.
3. If the s3.22 amendment request is not supported by the Department of Planning and Environment, submit a planning proposal for a Gateway determination, to amend the land use zone and development standards at 15 Stante Close and 430 Cowpasture Road, Middleton Grange, as per this report.

REPORT

Subject Sites

A minor zone amendment is proposed in the *Liverpool Local Environmental Plan 2008* (LLEP 2008), between the sites in Table 1 below. This is to reflect the development of land for the purposes of public and private recreation uses. Also refer to Images 2 and 3 below.

Table 1: Summary of minor amendment

Address	Owner	LLEP 2008 Zone	Proposed Zone
15 Stante Close, Middleton Grange (Lot 34 DP 1044841)	Serbian Cultural Club	RE1 Public Recreation RE2 Private Recreation	RE2 Private Recreation
430 Cowpasture Road, Middleton Grange (Lot 257 DP 2475)	Liverpool City Council	RE1 Public Recreation RE2 Private Recreation	RE1 Public Recreation



Image 2: 15 Stante Cl (Red) and 430 Cowpasture Rd (Blue), Middleton Grange (Source: Geocortex)

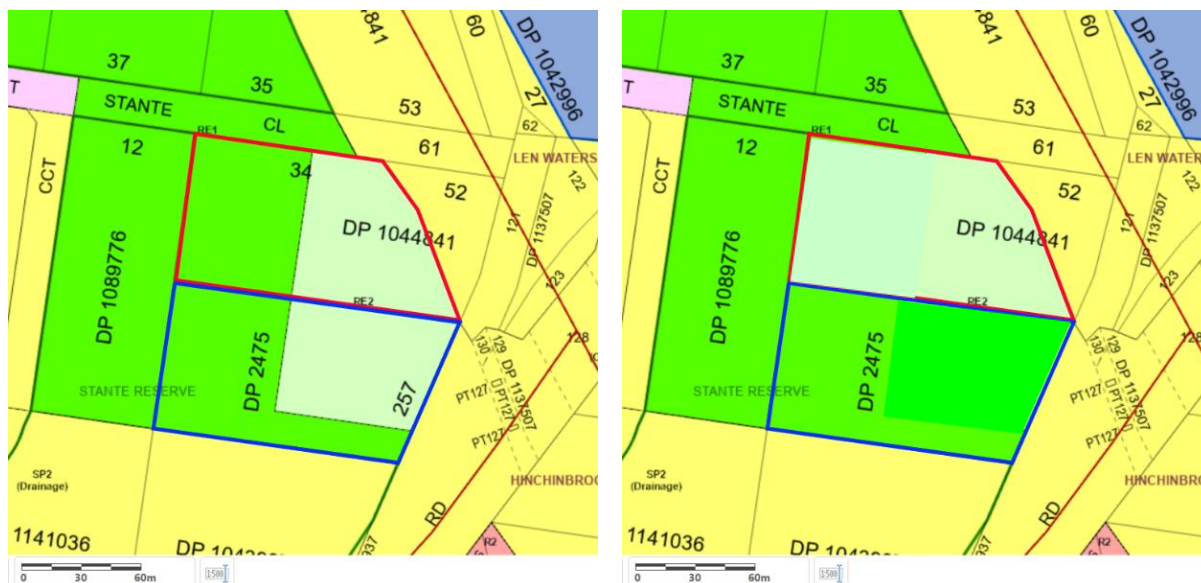


Image 3: Existing (left) and Proposed (right) Land Use Zones under LLEP 2008

Land Swap and Recreation Development

The LLEP 2008 reflects the original intended outcome for these sites, which involved a land swap between Liverpool City Council and the Serbian Cultural Club (the Club). This would result in the Club fronting Cowpasture Road, and a public recreation area located to the west.

The split recreation zoning was originally proposed due to Council's design for the public recreation area, which required acquisition of part of the Serbian Club site. As the Serbian Club could not function without car parking on the site, and the land swap was proposed to ensure the Club continued to have a sufficient area for future operation.

The land swap did not occur, and Council developed the entirety of 430 Cowpasture Road, Middleton Grange for public recreation purposes. This lot now contains a newly constructed community sport facility (including a basketball court).

The RE1 Public Recreation zoned land at the rear of 15 Stante Close is therefore not required for public recreation purposes, and the RE2 Private Recreation zoned land at 430 Cowpasture Road should be RE1 Public Recreation to reflect its use.

Section 3.22 Amendment of LLEP 2008

Section 3.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) allows for expedited amendments of environmental planning instruments (i.e. the LLEP 2008), where certain criteria can be met. It is intended to apply Section 3.22 (1)(b) and (1)(c) to proceed with an expedited amendment to the LLEP 2008. Justification is as follows:

- (b) address matters in the principal instrument that are of a consequential, transitional, machinery or other minor nature,*

The proposed changes would relate to the alignment of the zones and relevant development standards (floor space ratio, height of building, minimum lot size and land acquisition map), to reflect the ownership of the sites. Refer to **Attachment 1**.

The development of land for public recreation purposes occurred differently to what was intended by the LLEP 2008. However, this has resulted in no loss of public recreation land, as the two areas are similar in size. As development of the public recreation land has occurred by Council, and land acquisition is no longer required, the amendment to reflect this is minor in nature.

It is noted that permissible uses are similar across the land use zones, therefore the implications primarily relate to the land acquisition layer on 15 Stante Close, which is no longer required, as development of public recreation has been completed.

- (c) deal with matters that the Minister considers do not warrant compliance with the conditions precedent for the making of the instrument because they will not have any significant adverse impact on the environment or adjoining land,*

A planning proposal is not deemed necessary, as it will not have any impact on the environment or adjoining land. There are no adverse economic, social or environmental impacts by this proposed minor amendment.

There is no loss of public open space provided to the community, as Council has delivered the same extent of recreation area in the LLEP 2008, however in a different configuration. The impact to the Serbian Club site is positive, as they will no longer be burdened by inaccurate land acquisition and land use zone requirements.

It is noted that on 21 July 2023, Council contacted the Department of Planning and Environment (DPE) seeking preliminary advice whether a 3.22 amendment would be supported (**Attachment 1**). A response has not been received from DPE.

Next Steps

It is recommended to submit a s3.22 amendment request to the Department of Planning and Environment (DPE). If approved, the minor amendment will be made.

If the s3.22 amendment request is not supported by DPE, it is recommended that a planning proposal be submitted for a Gateway determination, and proceed with the amendment via a planning proposal process.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this recommendation.

CONSIDERATIONS

Economic	Facilitate economic development. Facilitate the development of new tourism based on local attractions, culture and creative industries.
Environment	There are no environmental and sustainability considerations.
Social	Provide cultural centres and activities for the enjoyment of the arts. Support community organisations, groups and volunteers to deliver coordinated services to the community.
Civic Leadership	There are no civic leadership and governance considerations.
Legislative	Section 3.22 & 3.36 of the <i>Environmental Planning and Assessment Act 1979</i> .
Risk	The risk is deemed to be Low. If a 3.22 Amendment to the LLEP 2008 is not supported by the Department of Planning and Environment, a planning proposal will be prepared for the site. The risk is considered within Council's risk appetite.

ATTACHMENTS

1. Letter to DPE - Advice for 3.22 Amendment



Ref No.: 234725.2023
Contact: Liana Pham
Ph: 8711 7461
Date: 21 July 2023

Robert Hodgkins
Director Central (Western), Western Parkland City
Department of Planning and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Sent via email: robert.hodgkins@planning.nsw.gov.au

RE: Request for expedited Amendment of the *Liverpool Local Environmental Plan 2008* at 15 Stante Close & 430 Cowpasture Road, Middleton Grange, NSW 2171

Dear Robert,

Council is requesting advice from the Department of Planning and Environment, regarding a proposed amendment to the *Liverpool Local Environmental Plan 2008* (LLEP 2008), regarding two adjacent lots of 15 Stante Close and 430 Cowpasture, Middleton Grange, NSW 2171.

Under the LLEP 2008, the lot at 15 Stante Close, Middleton Grange (Lot 34 DP 1044841) is under the ownership of Serbian Cultural Club (the Club), and is zoned partly RE1 Public Recreation and partly RE2 Private Recreation. The adjacent lot at 430 Cowpasture Road, Middleton Grange (Lot 257 DP 2475) is under the ownership of Liverpool City Council, is zoned partly RE1 Public Recreation and RE2 Private Recreation, and contains a newly constructed community sport facility (baseball court).

The Land Use Zone and other layers under the LLEP 2008 do not reflect the development of recreation uses which has occurred across these sites. It was originally intended that a land swap occur between the Club and Council (as reflected in the LLEP 2008), however the land swap did not occur. Council developed its RE2 Private Recreation zoned area of 430 Cowpasture Road, Middleton Grange for public recreation uses. Therefore, RE1 Public Recreation zoned land on the Serbian Cultural Club site is no longer required.

It is intended to apply the RE2 Private Recreation zone to the Serbian Cultural Club site and the RE1 Public Recreation site to the Liverpool City Council site. As the rezoning is considered minor in nature, Council intends to apply Section 3.22 (1)(b) and (1)(c) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to proceed with an expedited amendment to the LLEP 2008. Justification is as follows:

(b) *address matters in the principal instrument that are of a consequential, transitional, machinery or other minor nature*

The proposed changes would relate to the alignment of the zones and relevant development standards (floor space ratio, height of building, minimum lot size and land acquisition map), to reflect the ownership of the sites. The development of land for public recreation purposes occurred differently to what was intended by the LLEP 2008,



Customer Service Centre Ground floor, 33 Moore Street, Liverpool NSW 2170

All correspondence to Locked Bag 7064 Liverpool BC NSW 1871

Call Centre 1300 36 2170 **Email** lcc@liverpool.nsw.gov.au

Web www.liverpool.nsw.gov.au **NRS** 13 36 77 **ABN** 84 181 182 471

Request for expedited Amendment of LLEP 2008, Stante Reserve

however results in no loss of public recreation land, and the change to accurately reflect the zones is minor in nature.

- (c) *deal with matters that the Minister considers do not warrant compliance with the conditions precedent for the making of the instrument because they will not have any significant adverse impact on the environment or adjoining land,*

A planning proposal is not deemed necessary, as it will not have any impact on the environment or adjoining land. There are no adverse economic, social or environmental impacts by this proposed minor amendment. There is no loss of public open space provided to the community, as Council has delivered the same extent of recreation area in the LLEP 2008, however in a different configuration. The impact to the Serbian Club site is positive, as they will no longer be burdened by inaccurate land acquisition and land use zone requirements.

A copy of the background information and proposed maps are enclosed for your consideration. Feedback regarding the progression of this amendment via Clause 3.22 of the EP&A Act is requested by 2 August 2023.

Should you require any further information on this matter, please contact Liana Pham, Strategic Planner, on 8711 7461 or phaml@liverpool.nsw.gov.au.

Yours sincerely,



Ian Stendara
Acting Coordinator Strategic Planning

*Request for expedited Amendment of LLEP 2008, Stante Reserve***Additional Information – Proposed CI 3.22 EP&A Act Amendment****Overview of Amendment**

A minor zone amendment is proposed in the *Liverpool Local Environmental Plan 2008* (LLEP 2008), between the sites in Table 1 below, to reflect the development of land for the purposes of public and private recreation uses.

The LLEP 2008 reflects the original intended outcome for these sites, which involved a land swap between Liverpool City Council and the Serbian Cultural Club. This would result in the Club fronting Cowpasture Road, and a public recreation area located to the west. The land swap did not occur, and Council developed 430 Cowpasture Road, Middleton Grange for public recreation purposes. The RE1 Public Recreation zoned land at the rear of 15 Stante Close is therefore not required, and the RE2 Private Recreation zoned land at 430 Cowpasture Road should be RE1 Public Recreation.

Table 1: Summary of minor amendment

Address	Owner	LLEP 2008 Zone	Proposed Zone
15 Stante Close, Middleton Grange (Lot 34 DP 1044841)	Serbian Cultural Club	RE1 Public Recreation RE2 Private Recreation	RE2 Private Recreation
430 Cowpasture Road, Middleton Grange (Lot 257 DP 2475)	Liverpool City Council	RE1 Public Recreation RE2 Private Recreation	RE1 Public Recreation



Figure 1: 15 Stante CI (Red) and 430 Cowpasture Rd (Blue), Middleton Grange (Source: Geocortex)

Request for expedited Amendment of LLEP 2008, Stante Reserve

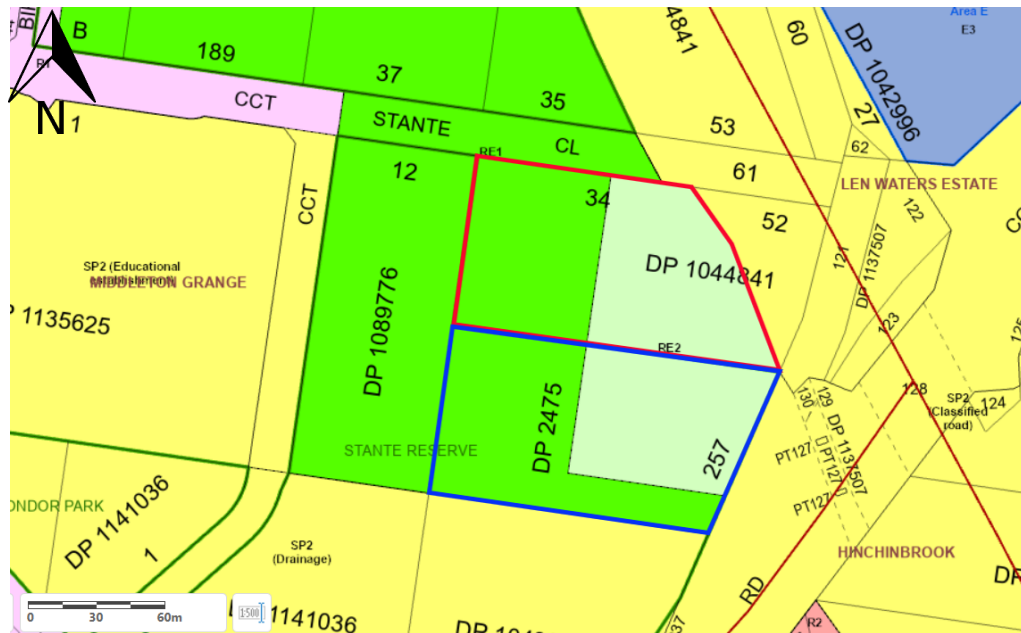


Figure 2: Current Zoning Map (Source LLEP 2008)

Proposed Map Amendments

To facilitate the proposed changes, the follow LEP 2008 maps is to be amended:

Table 2: Zoning Map

Existing Zoning		Proposed Zoning	
15 Stante Cl	RE1 & RE2	15 Stante Cl	RE2 Private
430 Cowpasture Rd	RE1 & RE2	430 Cowpasture Rd	RE1 Public

Request for expedited Amendment of LLEP 2008, Stante Reserve

Table 3: Floor Space Ratio Map

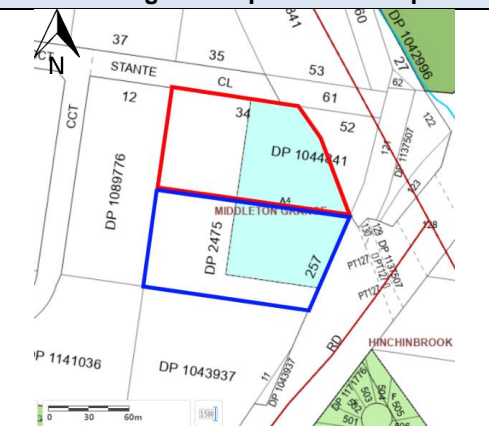
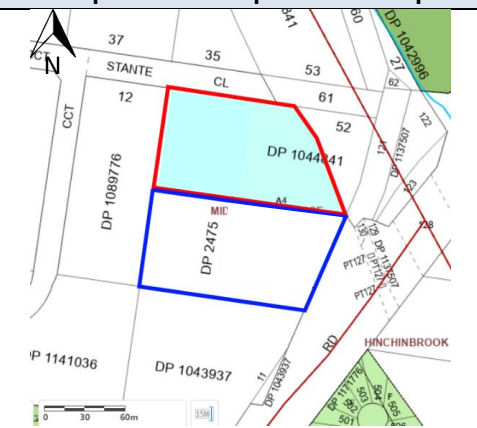
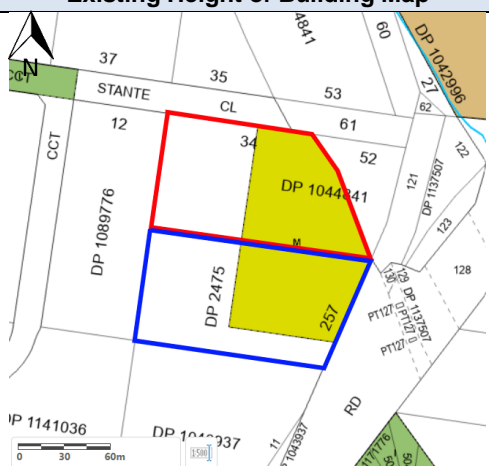
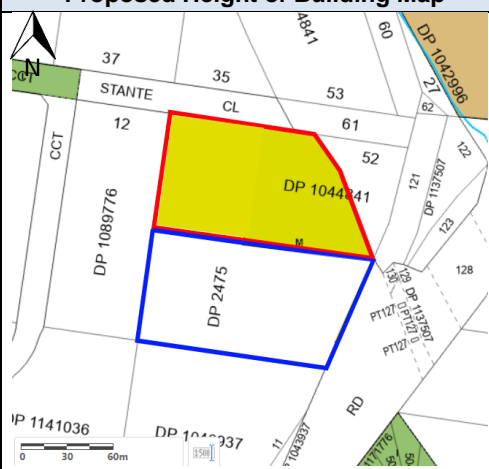
Existing Floor Space Ratio Map		Proposed Floor Space Ratio Map	
			
15 Stante CI	0.25:1 & Nil	15 Stante CI	0.25:1
430 Cowpasture Rd	0.25:1 & Nil	430 Cowpasture Rd	Nil

Table 4: Height of Building Map

Existing Height of Building Map		Proposed Height of Building Map	
			
15 Stante CI	12m & Nil	15 Stante CI	12m
430 Cowpasture Rd	12m & Nil	430 Cowpasture Rd	Nil

Request for expedited Amendment of LLEP 2008, Stante Reserve

Table 5: Lot Size Map

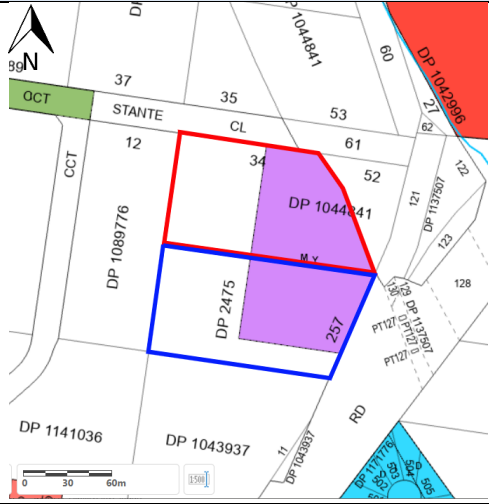
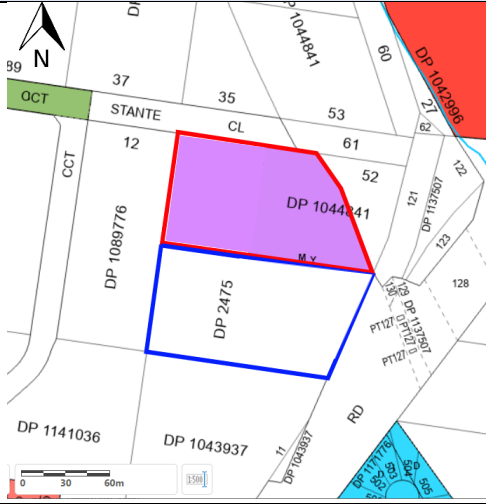
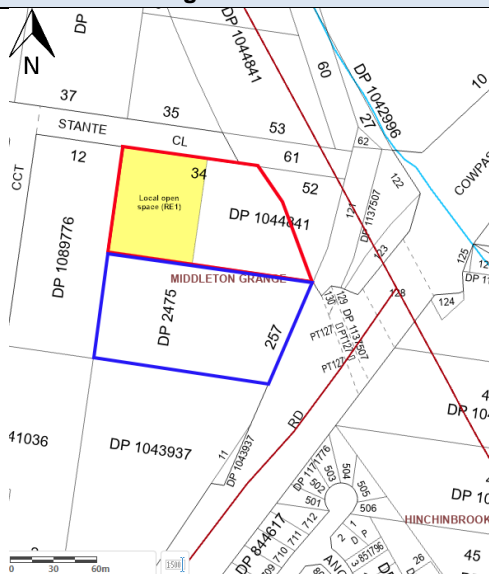
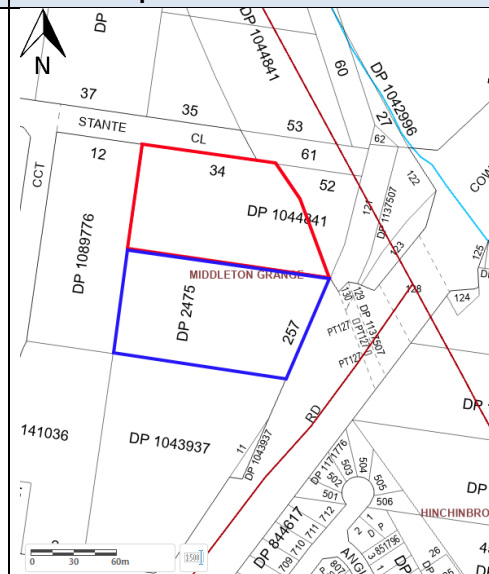
Existing Minimum Lot Size		Proposed Minimum Lot Size	
			
15 Stante CI	10,000sqm & Nil	15 Stante CI	10,000sqm
430 Cowpasture Rd	10,000sqm & Nil	430 Cowpasture Rd	Nil

Table 6: Land Reservation Acquisition Map

Existing Land Reservation		Proposed Land Reservation	
			
15 Stante CI	Marked & Nil	15 Stante CI	Nil
430 Cowpasture Rd	Nil	430 Cowpasture Rd	Nil

Request for expedited Amendment of LLEP 2008, Stante Reserve

If you do not understand this letter/application, please ring the Telephone Interpreter Service (131 450) and ask them to contact Council (1300 362 170). Office hours are 8.30 am to 5.00 pm, Monday to Friday.

ARABIC

إذا لم تستطع فهم هذا الطلب ، الرجاء الاتصال بخدمة الترجمة الهاتفية على رقم 131 450 واسألهم أن يتصلوا بالبلدية على رقم 1300 362 170 . دوام ساعات العمل من الساعة 8.30 صباحاً إلى 5.00 بعد الظهر من الاثنين إلى الجمعة.

CHINESE

如您看不懂此信 / 申請書，請打電話給「電話翻譯服務台」(131 450)，請他們聯絡市政廳(市政廳電話 1300 362 170)。市政廳辦公時間，星期一至星期五，上午八時三十分至下午五時。

CROATIAN

Ako ne razumijete ovo pismo/aplikaciju, molimo nazovite Službu prevodilaca i tumača (Translating and Interpreting Service - na broj 131 450) i zamolite ih da nazovu Općinu (na 1300 362 170). Radno vrijeme je od 8.30 ujutro do 5.00 popodne, od ponedjeljka do petka.

GERMAN

Wenn Sie diesen Brief/Antrag nicht verstehen können, rufen Sie bitte den Telefon Dolmetscher Dienst (Telephone Interpreter Service) (131 450) an und lassen Sie sich vom Personal mit dem Gemeinderat (Council) in Verbindung setzen (1300 362 170). Geschäftsstunden sind von 8:30 bis 17:00 Uhr, montags bis freitags.

GREEK

Αν δεν καταλαβαίνετε αυτή την επιστολή/αίτηση, σας παρακαλούμε να τηλεφωνήσετε στην Τηλεφωνική Υπηρεσία Διερχομένων (131 450) και να τους ζητήσετε να επικοινωνήσουν με το Δημοτικό Συμβούλιο (1300 362 170). Τα γραφεία του είναι ανοιχτά από τις 8.30π.μ. μέχρι τις 5.00π.μ. από Δευτέρα μέχρι και Παρασκευή.

HINDI

अगर आप इस पत्र/आवेदन को पढ़कर समझ नहीं पा रहे हैं तो कृपया टेलीफोन सहायक सेवा (131 450) को फोन करें और उनसे काउंसिल (1300 362 170) से संपर्क करने को कहें। कार्यालय का समय सोमवार से शुक्रवार तक प्रातः ८:३० बजे से सायं ५:०० तक है।

ITALIAN

Se non comprendi questa lettera/questo modulo di domanda, telefona al Servizio traduzioni e interpreti al numero 131 450 chiedendo di essere messo in contatto con il Comune (telefono 1300 362 170). Orario d'ufficio: ore 8.30 -17.00, dal lunedì al venerdì.

KHMER

បើលោកអ្នកមិនយល់ពីអត្ថន័យនៃប្រតិបត្តិការនេះទេ សូមទូរស័ព្ទទៅសេវាបកប្រែភាសាភាសាខ្មែរ (លេខ 131 450) ហើយស្នើសុំឱ្យគេទាក់ទងសាលាក្រុង (លេខ 1300 362 170)។ ពេលម៉ោងធ្វើការគឺម៉ោង 8 កន្លះព្រឹកដល់ម៉ោង 5 ល្ងាច ពីថ្ងៃចន្ទដល់ថ្ងៃសុក្រ

MACEDONIAN

Ako ne go razbirate ova pismo/aplikacija, ve molime da se javite vo Telefonската преведувачка служба на 131 450 и замолете ги да стапат во контакт со Општината на 1300 362 170. Работното време е од 8.30 часот наутро до 5.00 часот попладне од понеделник до петок.

MALTESE

Jekk ma tifhimx din l-ittra/applikazzjoni, jekk joghgbok ċempel lis-Servizz ta' l-Interpretu bit-Telefon (131 450) u itlobhom jikkuntattjaw il-Kunsill (1300 362 170). Il-hinijiet ta' l-Uffiċċju huma mit-8.30a.m. sal-5.00p.m., mit-Tnejn sal-Gimgha.

POLISH

Jeśli nie rozumiesz treści niniejszego pisma/podania, zadzwoń do Telefonicznego Biura Tłumaczy (Telephone Interpreter Service) pod numer 131 450 i poproś o telefoniczne skontaktowanie się z Radą Miejską pod numerem 1300 362 170. Godziny urzędowania: 08.30-17.00 od poniedziałku do piątku.

SERBIAN

Ako ne razumete ovo pismo/aplikaciju, molimo vas da nazovete Telefonску преводилачку службу (131 450) и замолите их да контактирају Општину (1300 362 170). Радно време је од 8.30 ујутро до 5.00 поподне, од понедељка до петка.

SPANISH

Si Ud. no entiende esta carta/solicitud, por favor llame al Servicio Telefónico de Intérpretes (131 450) y pídale que llamen a la Municipalidad (Council) al 1300 362 170. Las horas de oficina son de 8:30 am a 5:00 pm, de lunes a viernes.

TURKISH

Bu mektubu veya müracaatı anlayamazsanız, lütfen Telefon Tercüme Servisi'ne (131 450) telefon ederek Belediye ile (1300 362 170) ilişkiye geçmelerini isteyiniz. Çalışma saatleri Pazartesi - Cuma günleri arasında sabah saat 8:30 ile akşam 5:00 arasındır.

VIETNAMESE

Nếu không hiểu thư/dơn này, xin Quý Vị gọi cho Telephone Interpreter Service (Dịch Vụ Thông Dịch Qua Điện Thoại), số 131 450, và nhờ họ liên lạc với Council (Hội Đồng), số 1300 362 170. Giờ làm việc là 8 giờ 30 sáng đến 5 giờ 00 chiều, Thứ Hai đến Thứ Sáu.

PLAN 05**Planned Arterial Road Network for Western Sydney Aerotropolis**

Strategic Objective	Healthy, Inclusive, Engaging Support active and healthy lifestyles by improving footpaths, cycleways and walkways and other infrastructure that promotes and supports active transport
File Ref	336031.2023
Report By	Charles Wiafe - Manager Transport Management
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

The Department of Planning and Environment (DPE) has coordinated the preparation of the Western Sydney Aerotropolis Precinct Plan.

The Aerotropolis Precinct Plan has rezoned approximately 6,500 hectares of land, to permit urban development, open space and required public infrastructure, around the proposed Western Sydney International Airport. The Plan was prepared, and minor changes were incorporated to be finalised in May 2023. An associated Development Control Plan (DCP) which will guide development within the precinct was finalised in November 2022.

The Precinct is being planned adjacent to the Airport to generate approximately 200,000 new jobs in the broader Western Parkland City and become a high-skill jobs hub.

The Aerotropolis Precinct Plan applies to five precincts including the Aerotropolis Core, Badgerys Creek, Wianamatta-South Creek, Northern Gateway, Agribusiness as shown in Figure 1.

To facilitate developments in the Western Sydney Aerotropolis, Transport for NSW (TfNSW) has identified the arterial road network required to accommodate development in the Aerotropolis, as shown in Figure 1.

TfNSW has advised that the Federal and State Governments, in March 2022, provided funding for TfNSW to prioritise and prepare strategic business cases for seven arterial roads to support development of the Western Sydney Aerotropolis Precinct Plan.

Of the seven roads being prioritised, six are in the Liverpool Local Government Area and include:

- Eastern Ring Drive (To replace the northern section of Badgerys Creek Road to be closed to accommodate future additional airport runway).
- Devonshire Road
- Badgerys Creek Road (South)
- Bradfield Metro Link (A new road between Devonshire Road and Eastern Ring Drive)
- Pitt Street
- Fifteenth Avenue (west) extension to the Badgerys Road (South)

The prioritised roads include four roads which are currently local roads under the care and control of Council. It is expected that after project delivery by TfNSW, most of these roads (apart from Pitt Street) would be reclassified as state classified roads, to be managed by the agency.

Council and TfNSW executives have agreed to have bi-monthly meetings to provide a forum to discuss major transport projects in the Liverpool LGA. At last month's meeting, attended by the Director of Operations and Principal Transport Planner, TfNSW Executives have advised that the strategic business cases would be completed in December 2023, for project documentations to be presented to Infrastructure NSW for project assurance.

Following project assurance, concept and detailed designs will be carried out in stages on the prioritised roads and Council will be provided updates as the designs progress and funding allocations are made.

RECOMMENDATION

That Council:

1. Notes that TfNSW has assessed and identified the arterial road network required to facilitate the rezoned urban development in the Western Sydney Aerotropolis as indicated in the report.
2. Notes that TfNSW has received Federal and State Governments funding to prioritise and prepare strategic business cases for seven arterial roads including six within the Liverpool LGA, to be completed in December 2023.

REPORT

Background

The Aerotropolis Precinct Plan has rezoned approximately 6,500 hectares of land, to permit urban development, open space and required public infrastructure, around the proposed Western Sydney International Airport.

The Aerotropolis Precinct Plan has rezoned approximately 6,500 hectares of land, to permit urban development, open space and required public infrastructure, around the proposed Western Sydney International Airport. The Plan was prepared, and minor changes were incorporated to be finalised in May 2023. An associated Development Control Plan (DCP) which will guide development within the precinct was finalised in November 2022.

The Precinct is being planned adjacent to the Airport to generate approximately 200,000 new jobs in the broader Western Parkland City and become a high-skill jobs hub.

This adopted Precinct Plan applies to the following five precincts including:

- Two precincts wholly within the Liverpool LGA:
 - Aerotropolis Core
 - Agribusiness (excluding Luddenham Village as shown on Figure 1).
- One precinct i.e. The Northern Gateway is wholly within the Penrith LGA
- The remaining two precincts in both Liverpool and Penrith LGA:
 - Wianamatta-South Creek
 - Badgerys Creek

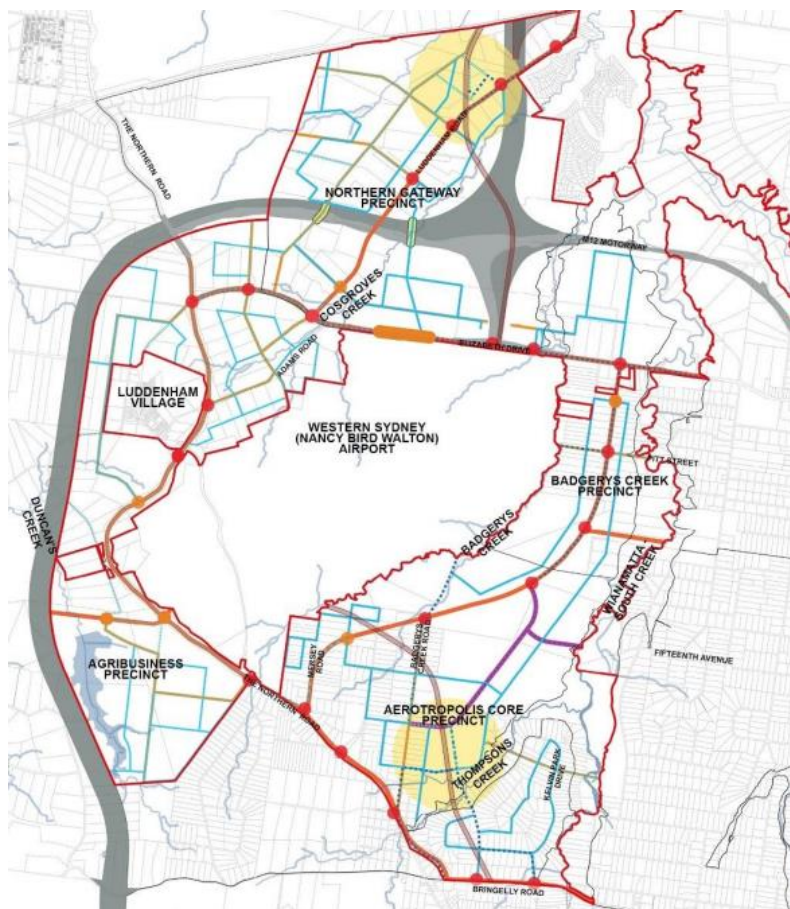


Figure 1

Within each Precinct, developments are being planned to be carried out in stages, with the first stage development area to align with the first stages of transport and utilities infrastructure deliveries, to achieve the employment and population targets of the WSA precinct.

As part of the land rezoning and the preparation of the Aerotropolis Precinct Plan and Development Control Plan (DCP), Department of Planning and Environment (DPE) has requested and worked with Transport for NSW (TfNSW) to identify the required arterial road network to accommodate the planned development.

TfNSW's assessment and recommended transport network including the new arterial road network as shown below, in blue.



The road network in the Liverpool LGA includes the following:

- Eastern Ring Drive (To replace the northern section of Badgerys Creek Road to be closed to accommodate future additional airport runway).
- Devonshire Road
- Badgerys Creek Road (South)
- Bradfield Metro Link (A new road between Devonshire Road and Eastern Ring Drive)
- Pitt Street
- Fifteenth Avenue (west) extension to the Badgerys Road (South)

Features of the prioritised arterial roads including road reserve, primary movement function and road upgrade configuration are as indicated in the table below.

Street Name	Road Reserve	Length (km)	Intended Function	Proposed Road Upgrade and Configuration
Eastern Ring Road	60m	7.6	General traffic including freight as a western bypass road around the Western Sydney Airport	New Road and Upgrade road section. Scope of Work - Four lanes with future provision for six lanes
Fifteenth Avenue West	45m	3.6	General traffic and a continuation of the Liverpool City Centre to WSA Transit Corridor	Existing road and bridge upgrade. Scope of Work- Four lanes (with a possibility of two dedicated bus lanes)
Devonshire Road	60m	7.5	General traffic including freight as a north-south link between Bringelly Road and Elizabeth Drive with a potential for realigned Mamre Road to provide a link to the M4 Motorway.	Existing road upgrade. Scope of Work- Four lanes with future provision for six lanes
Pitt Street	40m	0.7	General traffic and medium-term bus route to Western Sydney Airport.	Existing road upgrade. Scope of Work - Four lanes
Badgerys Creek Road South	40m	4.0	General traffic and key bus link from Bringelly Road to the Eastern Ring Road and Bradfield.	Existing road upgrade. Scope of Work Four lanes
Bradfield Metro Link	40m	2.5	General traffic and key bus link providing a connection between Devonshire Road and the Eastern Ring Road.	New Road Scope of work - Four lanes

The prioritised roads include four roads which are currently local roads under the care and control of Council. It is expected that after project delivery by TfNSW most of these roads (apart from Pitt Street) would be reclassified as state classified roads, to be managed by the agency.

Council and TfNSW executives have agreed to have bi-monthly meetings to provide a forum to discuss major transport projects in the Liverpool LGA. At last month's meeting, attended by the Director of Operations and Principal Transport Planner, TfNSW Executives have advised that the Strategic business cases would be completed in December 2023, for project documentations to be presented to NSW Infrastructure for project assurance.

With the construction of WSA, Council has been making representations to the Western Sydney Airport Company and the Federal Department of Transport and Regional Development for a WSA Ground Transport Plan to be prepared to accommodate planned developments within and around the airport.

The preparation of the Strategic business cases for the above-mentioned road network would provide the road network required in Ground Transport Plan for the airport.

After the project assurance, concept and detailed designs would be carried out in stages on the prioritised roads and Council would be provided updates as the designs progress and funding allocations are made. This would be followed by a multi-modal corridor to prioritise and prepare high-level strategic designs and final business cases for funding to be sought for stages project delivery.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this recommendation.

CONSIDERATIONS

Economic	<p>Deliver and maintain a range of transport related infrastructure such as footpaths, bus shelters and bikeways.</p> <p>Deliver a high-quality local road system including provision and maintenance of infrastructure and management of traffic issues.</p>
Environment	<p>Promote an integrated and user-friendly public transport service.</p> <p>Support the delivery of a range of transport options.</p>
Legislative	<p>Road Act 1993.</p>

Risk	There is no risk associated with this report.
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ATTACHMENTS

Nil

PLAN 06**Quarterly Report - Clause 4.6 Variations to
Development Standards**

Strategic Objective	Liveable, Sustainable, Resilient Deliver effective and efficient planning and high-quality design to provide best outcomes for a growing city
File Ref	341302.2023
Report By	William Attard - Manager Development Assessment
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

The Department of Planning and Environment (DPE) Planning Circular PS 20-002 requires a quarterly report be tabled at a Council meeting for information only, which outlines Development Applications that have been determined by the Sydney Western City Planning, the Liverpool Local Planning Panel, or by planning officers under delegated authority; where there was a variation to a Development Standard pursuant to Clause 4.6 of the respective Environmental Planning Instrument.

Council provides the quarterly report to DPE and publishes the register on an ongoing basis on Council's website.

There was one (1) development application approved in the last reporting quarter with a Clause 4.6 variation.

RECOMMENDATION

That Council receives and notes this report.

REPORT

Clause 4.6 of the Standard Instrument permits a consent authority to consider Development Applications that do not comply with specified Development Standards contained within the Liverpool Local Environmental Plan 2008 (LEP) or other Environmental Planning Instruments, such as State Environmental Planning Policies. This is a common rule that applies to all Councils across NSW.

Generally, a Development Standard is a requirement of an Environmental Planning Instrument that has a numerical value. Common development standards include Height of Building, Minimum Lot Size and Floor Space Ratio. Development Control Plan numerical values are not development standards.

Clause 4.6 is common to all standard instrument LEPs across all NSW Councils. The objectives of the Clause are:

- To provide an appropriate degree of flexibility in applying certain Development Standards to development, and
- To achieve better outcomes for and from development by allowing flexibility in particular circumstances.

Planning Circular PS20-002 specifies how Councils throughout NSW can use and interpret the Clause. The Circular also contains information about reporting requirements. For example, Council is required to report its (or the Local or Regional Panel's) use of Clause 4.6 to the Department of Planning and Environment on a quarterly basis.

To ensure transparency and integrity in the planning framework, and consistency with Planning Circular PS 20-002, quarterly reporting to a Council meeting is also required.

The Clause 4.6 Variation Register for the quarter between July to September 2023 is provided within **Attachment 1** for the information of the Council and community.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this recommendation.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	There are no social and cultural considerations.
Civic Leadership	There are no civic leadership and governance considerations.
Legislative	This report fulfils Council's obligation with Planning Circular PS 20-002.
Risk	There is no risk associated with this report.

ATTACHMENTS

1. Clause 4.6 Variation Register

ITEM 1 – DA-259/2022 – 430 Fifteenth Avenue, Austral

DA Number:	DA-259/2022
Property Address:	430 Fifteenth Avenue, Austral Lot 415, DP 2475
Development Category:	Residential Subdivision
Description:	Three (3) lot Torrens title subdivision with site remediation, tree removal, construction of roads and associated civil works.
Environmental Planning Instrument:	State environmental Planning Policy (Precincts - Western Parkland City) 2021
Zoning of Land:	R3 Medium Density Residential
Development Standard Varied:	Clause 4.1B – Residential Density
Justification of Variation:	<p>The proposed variation to the residential density standard was considered acceptable in this instance given the future land use proposed across the three (3) proposed lots, and therefore strict compliance was unreasonable or unnecessary in this circumstance.</p> <p>The proposed super-lot subdivision proposal and the indicative subdivision plan indicate two lots could achieve provision of Residential Flat Buildings, which would meet the minimum density requirement and was deemed suitable in terms of the site context and locality.</p> <p>The objectives of Clause 4.1B as well as the R3 Medium Density Residential zone were upheld as a result of the proposed development and the proposal was considered to be in the public interest.</p> <p>The minimum prescribed density applied to the site is 25dw/ha. The application proposed a density of 2.47 dw/ha. This equates to a variation of 90.12% to the development standard.</p>
Extent of Variation:	22.53 dw/ha / 90.12%
Concurring Authority:	Liverpool LPP under assumed concurrence
Date Determined:	31 July 2023

COM 01

**Grants Donations and Community Sponsorship
Report**

Strategic Objective	Healthy, Inclusive, Engaging Promote a harmonious community that celebrates its diversity
File Ref	319171.2023
Report By	Jacqueline Newsome - Coordinator Community Development
Approved By	Tina Bono - Director Community & Lifestyle

EXECUTIVE SUMMARY

Council is committed to building strong and resilient communities in the Liverpool Local Government Area (LGA) and maximising social wellbeing. Council helps achieve these goals by providing financial support through grants and sponsorships to develop leadership skills, increase participation in community activities and address identified social issues.

This report provides a recommendation for endorsement of funding totalling **\$29,800** from Community Sponsorship Program, Matching Grant Program, and the Sustainable Environment Program.

RECOMMENDATION

That Council:

1. Endorses the funding recommendation of **\$10,000** (GST exclusive) under the **Community Sponsorship Program** for the following project:

Applicant	Project	Recommended
Heroes with Ability	Heroes with Ability Schools Gala Day and 2023 International Day for People with Disability Inclusion Day	\$10,000

2. Endorses the funding recommendation of **\$14,800** (GST exclusive) under the **Matching Grant Program** for the following project:

Applicant	Project	Recommended
Learning Links	Learning Links' Aboriginal Education Program	\$14,800

3. Endorses the funding recommendation of **\$5,000** (GST exclusive) under the **Sustainable Environment Program** for the following project:

Applicant	Project	Recommended
Kemps Creek Public School	Waste Warriors & Gardeners	\$5000

REPORT

Community Sponsorship Program

The Community Sponsorship Program received one application which met the eligibility criteria and is recommended for funding as follows:

Applicant	Heroes with Ability		
Project	Heroes with Ability Schools Gala Day and 2023 International Day for People with Disability Inclusion Day		
Amount Requested	\$10,000	Total Project Cost	\$10,000
Location	Michael Clarke Recreation Centre, NSW 2170	Date	16 November 2023 and 3 December 2023

About the Applicant	<p>Heroes with Ability (HWA) is a not-for-profit organisation providing a modified sports program for people living with a disability in the Liverpool LGA. HWA works closely with young people from local schools to increase participation and inclusivity in sporting programs. The group has a strong presence in Liverpool and delivers its comprehensive program at Michael Clarke Recreation Centre.</p>
Description	<p>Objectives: The delivery of HWA Schools Gala Day and 2023 International Day for People with Disability Inclusion Day are designed to empower young people with disabilities to represent their schools and showcase their abilities in a multi sports day event. The events aim to raise awareness around youth inclusivity through sporting programs whilst celebrating each child's ability and determination.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Improved physical and mental wellbeing of people living with disability. • Increase community participation and community connection for students, families, schools, and support agencies. • Celebrate diversity and promote inclusion; and • Promotes Liverpool's reputation as a great place to live, work, and invest, with promotional opportunities for Council.
Beneficiaries	800+ participants, families of PwD, disability support groups, and local schools.
Assessment	<p>Recommended for Funding - \$10,000</p> <p>The project aligns with the Community Strategic Plan <i>Objective 1 - Healthy, Inclusive, Engaging, Strategic Plan Objective 3 - Evolving, Prosperous, Innovative Strategic Plan Objective 4 – Visionary, Leading, Responsible</i> and meets the Community Sponsorship Program funding priorities.</p> <p>Expected program outcomes 7.7.1 a), b), c), d), and e)</p>

Matching Grant Program

The Community Sponsorship Program received one application which met the eligibility criteria and is recommended for funding as follows:

Applicant	Learning Links		
Project	Learning Links' Aboriginal Education Program		
Amount Requested	\$14,800	Total Project Cost	\$29,600
Location	Cartwright Public School and Sadlier Public School	Date	January 2024 to June 2024
About the Applicant	<p>Established in 1972, Learning Links is a charitable not-for-profit organisation that aims to provide skills, services and family support to children and young people who have difficulties learning. Learning Links works in close collaboration with local schools in Liverpool, early childhood settings, professionals, and parents to help empower children with learning disabilities and difficulties to reach their full potential.</p> <p>The organisation is a proud and active member of the Liverpool Local Aboriginal Education Consultative Group and works closely with Aboriginal leaders and Aboriginal learning officers in the area to deliver and constantly improve Aboriginal Education Programs.</p>		

Description	<p>Objectives:</p> <p>Learning Links Aboriginal Education Program (AEP) supports Aboriginal children in Years 1-4 who have learning difficulties and disabilities, and who are at risk of disengaging with education at a vital stage of their life and development. The program fosters sustainable community change and connection for Aboriginal young people and communities by investing in Aboriginal children's education, empowering them to reach their full learning potential, thrive and live a bright, rewarding life. This will be achieved by providing free intensive and specialist early intervention to identify and support Aboriginal children at risk of falling behind in learning, and life.</p> <p>This program involves not only working with children, but also upskilling Teachers and Learning Support staff at participating school communities. In this way, the program builds capacity within the school to ensure the outcomes of the AEP are sustained beyond the intervention period.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Improved literacy and numeracy skills in participating aboriginal students. • Greater sense of inclusion and equity through programs that 'close the gap' in Aboriginal communities. • Increased number of teachers and learning support staff undertaking upskilling opportunities; and • Develop social connections and partnerships within aboriginal communities through collaboration and coordination of community support programs.
Beneficiaries	20 Aboriginal students, participating schools, and staff.
Assessment	<p>Recommended for Funding - \$14,800</p> <p>The project aligns with the Community Strategic Plan <i>Objective 3 - Evolving, Prosperous, Innovative</i> and meets the Matching Grant Program funding priorities.</p> <p>Expected program outcomes 7.6.2 a), b), and d).</p>

Sustainable Environment Program

The Sustainable Environment Program received one application which met the eligibility criteria and is recommended for funding as follows:

Applicant	Kemps Creek Public School		
Project	Waste Warriors & Gardeners		
Amount Requested	\$5,000	Total Project Cost	\$5,000
Location	Kemps Creek Public School, NSW, 2178	Date	November 2023 to June 2024
About the Applicant	Kemps Creek Public School is a K – 6 school located in Kemps Creek. The school is seeking opportunities to partner with local organisations to deliver programs where students learn essential life skills around sustainable living and develop important attitudes towards environmental impact and self-sufficiency.		
Description	<p>The Waste Warriors & Gardeners Club aims to provide students with a practical, hands-on program that promotes sustainable living and self-sufficiency through an active garden club. Students will undertake a range of daily tasks in an active approach towards teaching environmental sustainability.</p> <p>Funding will be used to purchase gardening equipment, compost materials and water harvesting tanks. The Waste Warriors & Gardeners Club aims to:</p> <ul style="list-style-type: none"> • Partner with Bunnings Hoxton Park and the Australian Botanic Garden Mount Annan to demonstrate to students how to grow and maintain herbs, fruits, and vegetables in garden beds. • Educate and equip students with nutritional knowledge, environmental awareness, and cultural awareness through an indigenous Australian plant program; and • Teach students the importance of waste minimisation and how to correctly dispose of food waste with a composting initiative. <p>Outcomes:</p> <ul style="list-style-type: none"> • Raise awareness and promote sustainable living as a way of life through active management of garden beds, water conservation and positive solutions to food waste. • Encourage students to develop leadership skills through the garden caretaker program; and 		

	<ul style="list-style-type: none"> Generate positive community engagement through partnerships with local businesses.
Beneficiaries	Kindergarten to Year 6 Students and school community.
Assessment	<p>Recommended for Funding - \$5,000</p> <p>The project aligns with the Community Strategic Plan <i>Direction 1 Creating Connection, Direction 2 Strengthening and Protecting our Environment</i> and meets the Sustainable Environment Grants Program's funding priorities of <i>Waste Minimisation; Sustainable Water Use; Environmental Improvement; and Sustainable Living.</i></p> <p>Expected program outcomes 7.5.1 a), b), c) e) and f)</p>

FINANCIAL IMPLICATIONS

Costs associated with this recommendation have been included in Council's budget for the current year and long-term financial plan. A full breakdown of operating budget is included below.

COMMUNITY SPONSORSHIP			
Budget	Balance	<i>Recommended for funding in this report</i>	Remaining
\$100,000	30,971	<i>\$10,000</i>	20,971
COMMUNITY GRANTS			
Budget	Balance	<i>Recommended funding in this report</i>	Remaining
\$102,000	\$48,739	<i>Nil</i>	\$48,739
MATCHING GRANTS			
Budget	Balance	<i>Recommended funding in this report</i>	Remaining
\$200,000	\$200,000	<i>\$14,800</i>	\$185,200
SUSTAINABLE ENVIRONMENT GRANTS*			
Budget	Balance	<i>Recommended funding in this report</i>	Remaining
\$75,000	\$75,000	<i>\$5000</i>	\$70,000
COMBINED FUNDING BALANCE			
Combined Budget	Combined Balance	<i>Total recommended funding in this report</i>	Remaining
\$477,000	\$354,710	<i>\$29,800</i>	\$324,910

CONSIDERATIONS

Economic	The financial impacts are outlined in the report above.
Environment	Raise community awareness and support action in relation to environmental issues.
Social	Support community organisations, groups, and volunteers to deliver coordinated services to the community.
Civic Leadership	Foster neighborhood pride and a sense of responsibility. Operate a well-developed governance system that demonstrates accountability, transparency, and ethical conduct.
Legislative	Local Government Act 1993, including sections 24 and 356. The council may by resolution contribute money or otherwise grant financial assistance to people for the purpose of exercising its functions. The Council's grant programs are targeted to ensure a lawful and consistent approach to its contributions and financial assistance. Key functions that are supported are Council's functions of providing goods, services, and facilities, and conducting activities, appropriate to the current and future needs within the Liverpool local community and of the wider public, subject to the Local Government Act, the regulations, and any other law.
Risk	There is no risk associated with this report.

ATTACHMENTS

Nil

CORP 01

**Tabling Annual Pecuniary Interest Returns for
Councillors and Designated Persons**

Strategic Objective	Visionary, Leading, Responsible Demonstrate a high standard of transparency and accountability through a comprehensive governance framework
File Ref	335014.2023
Report By	Jessica Saliba - Acting Manager Council & Executive Services
Approved By	Farooq Portelli - Director Corporate Support

EXECUTIVE SUMMARY

The Model Code of Conduct for Local Councils in NSW was adopted by Liverpool City Council in August 2022. Clause 4.25 of the code requires that the completed annual pecuniary interest returns of councillors and designated persons holding office and occupying positions as at 30 June 2023, be tabled before the Council.

Councillors and designated officers were asked to complete their pecuniary interest return by 30 September 2023 to ensure that they were received and completed by the deadline specified in clause 4.26 of the Code of Conduct. All Councillors and designated staff who were required to submit the annual pecuniary return have done so and these have been tabled.

RECOMMENDATION

That Council:

1. Note the annual pecuniary interest returns of Councillors and designated persons, as at 30 June 2023, are now tabled before the Council in accordance with clause 4.25 of the Model Code of Conduct; and
2. Agree to make redacted copies of the annual pecuniary interest returns available to the public, as set out in the report.

REPORT

Clause 4.21 of the Model Code of Conduct provides that a Councillor or a designated person, holding that position as at 30 June in any year, must complete and lodge with the Chief Executive Officer an annual pecuniary interest return within three months after that date, in a form prescribed by the Code of Conduct.

The code details the requirements for the registration and tabling of returns lodged by Councillors and designated persons as follows:

- 4.24 The general manager must keep a register of returns required to be made and lodged with the general manager.*
- 4.25 Returns required to be lodged with the general manager under clause 4.21(a) and (b) must be tabled at the first meeting of the council after the last day the return is required to be lodged.*

On 7 August 2023 an email was sent to the Councillors and designated persons advising them of the requirement to have their return completed as soon as possible by completing the form online.

Where the CEO becomes aware of a breach of the pecuniary interest provisions of the Code of Conduct, he / she is obliged to notify both Audit NSW and the OLG. Breaches by staff are managed by the CEO under the Award. The OLG has jurisdiction over managing the review of alleged breaches by councillors.

A register of all returns lodged by Councillors and designated persons, in accordance with clause 4.24 of the code, is currently being kept by Council's Governance Unit as required.

Requirement to publish:

Annual written returns are open access and should be made available for the public to see, however the returns contain personal information about Councillors and staff.

The mandatory proactive release provisions of the *Government Information (Public Access) Act 2009* (GIPA Act) and the *Government Information (Public Access) Regulation 2018* (GIPA Regulation) apply to the disclosure of information contained in returns disclosing the interests of Councillors and designated persons. The combined effect of the GIPA Act and the GIPA Regulation is that the information in the returns needs to be disclosed on Councils website unless there is an overriding public interest against disclosure.

Overriding public interest:

There is an overriding public interest against disclosure under the GIPA Act if there are public interest considerations against disclosure and, on balance, those considerations outweigh the public interest considerations in favour of disclosure.

There are public interest considerations in favour of disclosing the annual returns, reflected in the mandatory proactive release provisions of the GIPA Act. Disclosure of the information could reasonably be expected to enhance government accountability. This is a strong consideration in favour of disclosure as the information requested has the potential to promote transparency for those interested in Council's decision making.

When applying the public interest test, Council is entitled to consider public interest considerations against disclosure set out in the table to section 14 of the GIPA Act. There are considerations against disclosure of the annual declarations if Council considers disclosure could reasonably be expected to:

- reveal an individual's personal information; or
- contravene an information protection principle under the *Privacy and Personal Information Protection Act 1998*.

Personal information is defined in the GIPA Act to include information about an individual whose identity is apparent or can reasonably be ascertained from the information. The annual declarations contain personal information about the individuals who provided the declarations. This includes information about properties owned by the individuals and where they may reside. When providing the declarations, the Mayor, councillors and designated staff have requested that their personal information is redacted.

After balancing the public considerations for and against publication of the annual disclosures, it is proposed that there is an overriding public interest against disclosure of personal information such as home addresses and signatures. This is on the basis that protecting the privacy of individuals, particularly due to considerations of safety and preventing identity theft, should be given priority over the public interest in transparency and public participation in Council decision making. It is also important that individuals remain confident in the Council's ability to protect personal and private information when making declarations and assisting the Council.

Reason for redacting information:

Section 6(4) of the GIPA Act requires Council to facilitate public access to open access information in a record by deleting information from a copy of the record to be made publicly available, if inclusion of the information would otherwise result in there being an overriding public interest against disclosure of the record, and it is practicable to delete the information. It is proposed that Council publish the annual pecuniary interest returns after redacting personal information such as home addresses and signatures. The redactions will remove the overriding public interest against disclosure.

Releasing the information contained in the returns of Councillors and designated persons in this manner facilitates the legitimate public interest in having access to the information, while protecting the individual's right to privacy and safety.

On that basis, governance will publish redacted versions of the declarations.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this recommendation.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	There are no social and cultural considerations.
Civic Leadership	Operate a well-developed governance system that demonstrates accountability, transparency and ethical conduct.
Legislative	Clauses 4.21, 4.24 and 4.25 of the Model Code of Conduct
Risk	There is no risk associated with this report.

ATTACHMENTS

Nil

CORP 02

Investment Report September 2023

Strategic Objective	Visionary, Leading, Responsible Ensure Council is accountable and financially sustainable through the strategic management of assets and resources
File Ref	338890.2023
Report By	Vishwa Nadan - Chief Financial Officer
Approved By	Farooq Portelli - Director Corporate Support

EXECUTIVE SUMMARY

This report details Council's investment portfolio and its performance at 30 September 2023. Key highlights include:

- Council held investments with a market value of \$403 million.
- The Reserve Bank of Australia (RBA)'s official cash rate is at 4.10 per cent.
- The portfolio yield (for the year to September 2023) was 12 basis points above the benchmark (AusBond Bank Bill Index)

	AusBond Bank Bill Index (ABBI)
Benchmark	3.56%
Portfolio yield	3.68%
Performance above benchmark	0.12%

- The current ABBI benchmark reflects recent RBA actions to lift the cash rate. The portfolio performance is expected to be below ABBI benchmark in coming months and this trend will continue until such time low-yielding investments mature.
- Year-to-date, Council's investment income was \$1.90 million higher than the original budget. This is due to a combination of increase in market interest rates and unrealised gain in fair value of Floating Rate Notes (FRNs).
- Year-to-date, Council's investment in mortgage-backed securities (MBSs) is valued at \$394 thousand below face value. Council's investment advisor continues to review Council's investment in MBSs and recommends Council continue to hold its

investments in the Class A and both Class C securities. There is significant uncertainty associated with these investments, however presently the investment advisor believes there is, on balance, more upside opportunity than downside risk. This is subject to ongoing regular review. MBSs are no longer rated.

- Council's investments and reporting obligations fully complied with the requirements of section 625 of the *Local Government Act 1993* and section 212 of the *Local Government (General) Regulation 2021*.
- Council's portfolio also fully complied with limits set out in its current Investment Policy, noting the exception applicable to MBSs (as investment in them pre-dates the current Investment Policy).
- Council is committed to NSW TCorp's balanced investment framework and held 18.19 per cent of its portfolio in ADIs rated BBB and below.

RECOMMENDATION

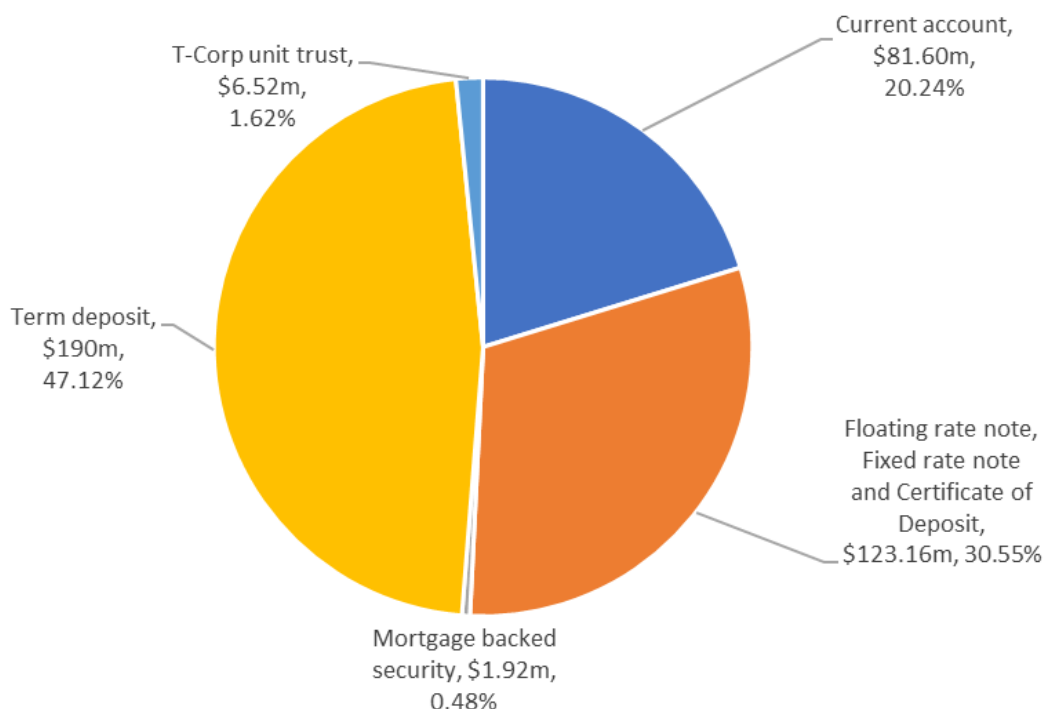
That Council receive and note this report.

REPORT

Section 212 of the *Local Government (General) Regulation 2021* requires that the Responsible Accounting Officer must provide Council with a written report setting out details of all money that Council has invested under section 625 of the *Local Government Act 1993*.

Council's portfolio

At 30 September 2023, Council held investments with a market value of \$403 million. Council's investment register detailing all its investments is provided as an attachment to this report. In summary, Council's portfolio consisted of investments in:



The ratio of market value compared to face value of various debt securities is shown in the table below.

Asset class	Sep-23	Aug-23	Jun-23
Senior debts (FRNs ,TCDs & FRBs)*	98.33%	98.54%	98.25%
MBS (Reverse mortgage-backed securities)	82.97%	82.55%	82.02%
T-Corp unit trusts	106.46%	108.98%	107.38%

***Definition of terms**

- *FRN - Floating Rate Note - returns an aggregate of a fixed margin and a variable benchmark (usually the Bank Bill Swap Rate).*
- *FRB - Fixed Rate Bond – returns a fixed coupon (interest) rate and is tradeable before maturity.*
- *TCD - Transferrable Certificate of Deposit - security issued with the same characteristics as a term deposit, however it can be sold back (transferred) into the market prior to maturity. A floating TCD pays a coupon linked to a variable benchmark (90-day Bank Bill Swap Rate).*

Council continues to closely monitor the investments in its portfolio to ensure continued compliance and minimal exposure to risk.

Council is committed to NSW TCorp's balanced investment framework and held 18.19 per cent of its portfolio in ADIs rated BBB and below.

Mortgaged-backed securities

Council's investment advisor regularly reviews investments in grandfathered mortgage-backed securities (MBSs) and continues to recommend "hold" position on investments in Class A and both Class C securities.

There is significant uncertainty associated with these investments, however presently the investment advisors believe there is, on balance, more upside opportunity than downside risk. Notwithstanding this recommendation, the investment advisors has assessed that both Class C securities are likely to eventually default. However, Council will continue to receive interest up until default which is likely to be many years in the future. Fitch Rating Agency has decided to withdraw its rating on MBSs and as a result, Council's investments in these securities are now classed as non-rated. Year-to-date, Council's investment in MBSs are valued at \$394 thousand below face value.

Portfolio maturity profile

The table below shows the percentage of funds invested at different durations to maturity.

Term to maturity	Total	% Holdings	Term to maturity policy limit minimum	Term to maturity policy limit maximum	Complies to Investment policy "Yes/No"
Current account	81,597,237	20.24%			
Term deposits < 1 year	121,000,000	30.01%			
T-Corp unit trust	6,520,756	1.62%			
Tradeable securities	123,159,957	30.55%			
Portfolio % < 1 year (Short term liquidity)	332,277,950	82.41%	30%	100%	Yes
Term deposit > 1 year < 3 years	69,000,000	17.11%	0%	70%	Yes
Grand fathered securities	1,920,934	0.48%	N/A	N/A	Yes
Portfolio % (Medium term liquidity)	70,920,934	17.59%			Yes
Total portfolio	403,198,885	100.00%			

Counterparty policy limit compliance

Issuer	Security rating	Market value	% Total value	Maximum Institutional policy limit % holdings	Complies to Investment policy "Yes/No"
AMP Bank Ltd	BBB	17,062,892	4.23%	15%	Yes
ANZ Banking Group Ltd	AA-	36,738,101	9.11%	35%	Yes
Auswide Bank	BBB+	3,000,000	0.74%	15%	Yes
Bendigo & Adelaide Bank Ltd	BBB+	2,662,861	0.66%	15%	Yes
Bank of Queensland Ltd	BBB+	19,175,907	4.76%	15%	Yes
Citibank Australia Ltd	A+	1,001,027	0.25%	25%	Yes
Commonwealth Bank of Australia Ltd	AA-	120,124,525	29.79%	35%	Yes
Emerald Reverse Mortgage Trust (Class A)	Unrated	748,488	0.19%	5%	Yes
Emerald Reverse Mortgage Trust (Class C)	Unrated	1,172,447	0.29%	5%	Yes
Great Southern Bank	BBB	8,502,763	2.11%	15%	Yes
G&C Mutual Bank	BBB	3,000,000	0.74%	15%	Yes
HSBC Sydney Branch	AA-	5,010,820	1.24%	35%	Yes
ING Direct	A	16,000,000	3.97%	25%	Yes
ING Direct	AAA	1,611,112	0.40%	35%	Yes
Macquarie Bank	A+	16,017,705	3.97%	25%	Yes
Members Equity Bank Ltd	BBB	5,000,000	1.24%	15%	Yes
National Australia Bank Ltd	AA-	43,221,601	10.72%	35%	Yes
Northern Territory Treasury	AA-	15,000,000	3.72%	35%	Yes
NSW Treasury Corporation	Unrated	6,520,756	1.62%	5%	Yes
P&N Bank	BBB	5,000,000	1.24%	15%	Yes
Rabobank Australia Ltd	A+	4,196,137	1.04%	25%	Yes
RACQ Bank	BBB+	1,499,132	0.37%	15%	Yes
Sumitomo Mitsui Banking	A	3,985,092	0.99%	25%	Yes
Suncorp Bank	A+	9,121,979	2.26%	25%	Yes
UBS AG	A+	2,300,985	0.57%	25%	Yes
Westpac Banking Corporation Ltd	AA-	55,524,559	13.77%	35%	Yes
Portfolio Total		403,198,885	100.00%		

Credit rating policy limit compliance

Credit rating	Market value	% Portfolio	Maximum policy limit	Complies to Investment policy "Yes/No"
AAA Category	1,611,112	0.40%	100%	Yes
AA Category	275,619,605	68.36%	100%	Yes
A Category	52,622,925	13.05%	60%	Yes
BBB Category	64,903,553	16.10%	45%	Yes
Unrated	8,441,690	2.09%	10%	Yes
Total Portfolio	403,198,885	100.00%		

Compliance with Investment policy – In summary

Legislative requirements	✓	Fully compliant, noting exception applicable to grandfathered mortgaged-backed investments.
Portfolio credit rating limit	✓	Fully compliant
Institutional exposure limits	✓	Fully compliant
Overall portfolio credit limits	✓	Fully compliant
Term to maturity limits	✓	Fully compliant

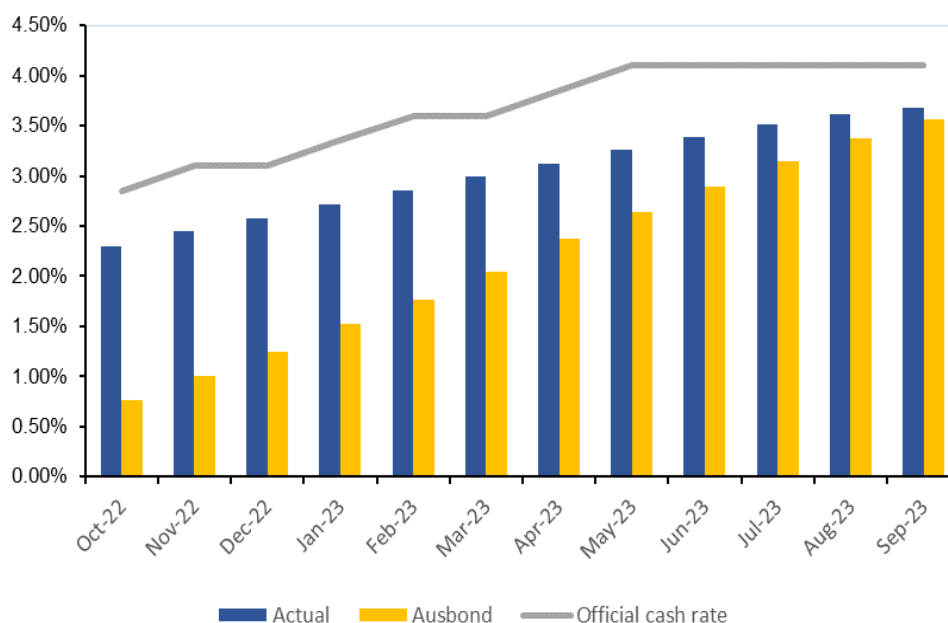
Portfolio performance against relevant market benchmark

Council's Investment Policy prescribes the AusBond Bank Bill Index (ABBI) as a benchmark to measure return on cash and fixed interest securities. The ABBI represents the average daily yield of a parcel of bank bills. Historically there has been a positive correlation between changes in the cash rate and the resulting impact on the ABBI benchmark.

The current ABBI benchmark reflects recent RBA actions to lift the cash rate. The portfolio performance is expected to be below ABBI benchmark in coming months and this trend will continue until such time low-yielding investments mature.

The portfolio yield for the year to September 2023 exceeded the ABBI index by 12 basis points (portfolio yield: 3.68%; ABBI: 3.56%).

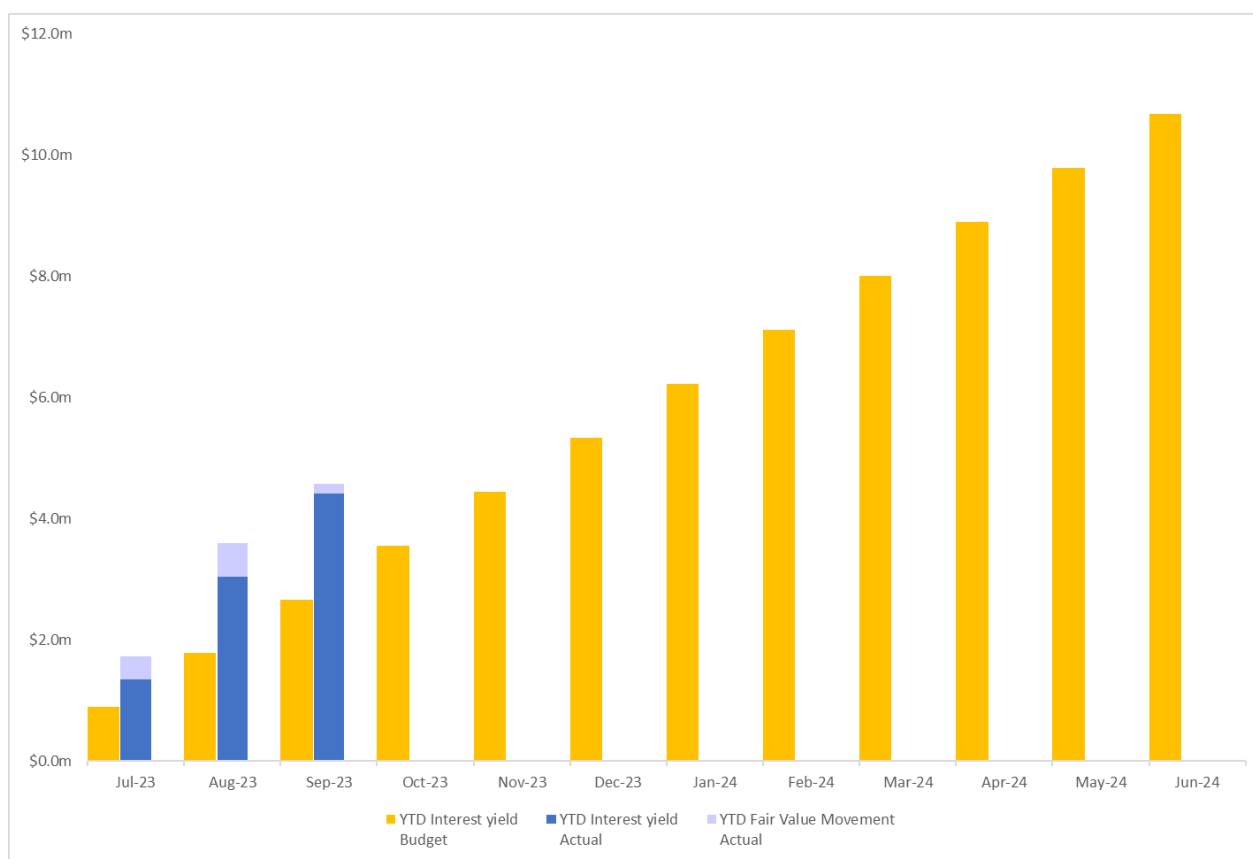
Comparative yields for the previous months are charted below:



Performance of portfolio returns against budget

Year-to-date, Council's investment income was \$1.90 million higher than the original budget. This is due to a combination of increase in market interest rate and unrealised gain in fair value of Floating Rate Notes (FRNs).

	YTD Budget	YTD Actuals	Budget Variance
Interest yield on cash holdings	\$2.67m	\$4.41m	\$1.74m
Fair value market movement	\$0.00m	\$0.16m	\$0.16m
Total	\$2.67m	\$4.57m	\$1.90m



Economic outlook – Reserve Bank of Australia

The Reserve Bank of Australia has kept the official cash rate at 4.10 per cent in its meeting on 3 October 2023.

Certificate of Responsible Accounting Officer

The Chief Financial Officer, as Responsible Accounting Officer, certifies that the investments listed in the attached report have been made in accordance with section 625 of the *Local Government Act 1993*, section 212 of the *Local Government (General) Regulation 2021* and Council's Investment Policy at the time of their placement. The previous investments are covered by the grandfathering clauses of the current investment guidelines issued by the Minister for Local Government.

CONSIDERATIONS

Economic	Council's investment income was \$1.90 million higher than the original budget at 30 September 2023.
Environment	There are no environmental and sustainability considerations.
Social	There are no social and cultural considerations.
Civic Leadership	There are no civic leadership and governance considerations.
Legislative	Local Government Act 1993, section 625 Local Government (General) Regulation 2021, section 212 As required by the Local Government Act, Council is fully compliant with the ministerial requirements specified in the <i>Local Government Act 1993 – Investment Order</i> (relating to investments by councils) and with reporting requirements under section 212 of the <i>Local Government (General) Regulation 2021</i> .
Risk	The capital value and return-on-investment is subject to market risks. Investment limits prescribed in Council's policy framework is aimed to mitigate these risks.

ATTACHMENTS

1. Investment Portfolio September 2023



Portfolio Valuation As At 30 September 2023

Fixed Interest Security	Maturity Date	Rating	Current	Market Value	Total	Yield
Current Account						
CBA Business Saver		AA-	65,458,489.43	65,458,489.43	16.23%	4.20%
CBA General Account		AA-	1,045,697.24	1,045,697.24	0.26%	0.00%
AMP Business Saver		BBB	15,056,606.93	15,056,606.93	3.73%	2.65%
AMP Notice Account		BBB	6,285.02	6,285.02	0.00%	4.70%
Macquarie Bank Accelerator Account		A+	1,574.06	1,574.06	0.00%	3.91%
Macquarie Bank Account		A+	28,584.63	28,584.63	0.01%	3.91%
			81,597,237.31	81,597,237.31	20.23%	
Fixed Rate Bond						
Commonwealth Bank	14/01/2027	AA-	5,000,000.00	4,600,420.00	1.14%	2.40%
Bank of Queensland	29/10/2025	BBB+	4,000,000.00	3,889,160.00	0.96%	4.00%
Bank of Queensland	27/10/2026	BBB+	4,750,000.00	4,286,746.75	1.06%	2.10%
Bendigo & Adelaide Bank	17/03/2025	BBB+	2,750,000.00	2,662,860.75	0.66%	3.00%
UBS AG	26/02/2026	A+	2,550,000.00	2,300,984.85	0.57%	1.10%
ING Direct	19/08/2026	A	1,800,000.00	1,611,111.60	0.40%	1.10%
Macquarie Bank	14/09/2026	A+	4,200,000.00	4,176,370.80	1.04%	4.95%
NAB	25/02/2027	AA-	4,500,000.00	4,198,999.50	1.04%	2.90%
Suncorp	25/01/2027	A+	4,500,000.00	4,117,603.50	1.02%	2.50%
			34,050,000.00	31,844,257.75	7.90%	
Floating Rate Note						
ANZ Bank	06/12/2023	AA-	7,000,000.00	7,004,158.00	1.74%	5.15%
ANZ Bank	29/08/2024	AA-	5,000,000.00	5,011,665.00	1.24%	4.91%
ANZ Bank	16/01/2025	AA-	3,000,000.00	3,007,596.00	0.75%	5.06%
ANZ Bank	31/03/2028	AA-	2,500,000.00	2,515,165.00	0.62%	5.21%
ANZ Bank	11/09/2028	AA-	4,200,000.00	4,199,517.00	1.04%	5.06%
Citibank, N.A.	14/11/2024	A+	1,000,000.00	1,001,027.00	0.25%	5.05%
Commonwealth Bank	11/01/2024	AA-	9,500,000.00	9,515,732.00	2.36%	5.43%
Commonwealth Bank	17/08/2028	AA-	3,500,000.00	3,504,186.00	0.87%	5.11%
Credit Union Australia	24/10/2024	BBB	2,500,000.00	2,502,762.50	0.62%	5.48%
HSBC	27/09/2024	AA-	3,000,000.00	3,006,492.00	0.75%	4.97%
HSBC	27/09/2024	AA-	2,000,000.00	2,004,328.00	0.50%	4.97%
Macquarie Bank	07/08/2024	A+	4,000,000.00	4,007,184.00	0.99%	4.98%
Macquarie Bank	12/02/2025	A+	3,000,000.00	3,005,763.00	0.75%	5.01%
Macquarie Bank	14/09/2026	A+	4,800,000.00	4,798,228.80	1.19%	4.97%
NAB	26/02/2024	AA-	5,000,000.00	5,010,665.00	1.24%	5.18%
NAB	19/06/2024	AA-	4,000,000.00	4,011,936.00	1.00%	5.05%
Rabobank Australia Branch	27/01/2027	A+	2,700,000.00	2,685,706.20	0.67%	5.01%
Rabobank Australia Branch	19/01/2028	A+	1,500,000.00	1,510,431.00	0.37%	5.47%
RACQ Bank	24/02/2026	BBB+	1,500,000.00	1,499,131.50	0.37%	5.64%
Suncorp	30/07/2024	A+	3,000,000.00	3,002,625.00	0.74%	5.04%
Suncorp	30/07/2024	A+	2,000,000.00	2,001,750.00	0.50%	5.04%
Sumitomo Mitsui Banking	20/01/2027	A	4,000,000.00	3,985,092.00	0.99%	5.08%
Westpac	16/11/2023	AA-	6,000,000.00	6,001,416.00	1.49%	5.10%
Westpac	24/04/2024	AA-	4,000,000.00	4,015,200.00	1.00%	5.50%
Westpac	16/08/2024	AA-	2,500,000.00	2,507,942.50	0.62%	5.03%
			91,200,000.00	91,315,699.50	22.65%	

Mortgage Backed Security

EmeraldMBS2006-1A	21/08/2051	Unrated	815,308.94	748,487.85	0.19%	4.59%
EmeraldMBS2006-1C	21/08/2056	Unrated	1,000,000.00	800,814.00	0.20%	5.34%
EmeraldMBS2007-1C	23/07/2057	Unrated	500,000.00	371,632.50	0.09%	5.31%
			2,315,308.94	1,920,934.35	0.48%	

Term Deposit

AMP	04/12/2023	BBB	2,000,000.00	2,000,000.00	0.50%	3.30%
ANZ	30/04/2024	AA-	5,000,000.00	5,000,000.00	1.24%	5.09%
ANZ	01/07/2024	AA-	5,000,000.00	5,000,000.00	1.24%	5.13%
ANZ	30/07/2024	AA-	5,000,000.00	5,000,000.00	1.24%	5.15%
Auswide Bank	07/02/2024	BBB	3,000,000.00	3,000,000.00	0.74%	5.45%
Bank of Queensland	22/12/2023	BBB+	5,000,000.00	5,000,000.00	1.24%	1.20%
Bank of Queensland	28/03/2024	BBB+	3,000,000.00	3,000,000.00	0.74%	2.40%
Bank of Queensland	31/05/2024	BBB+	3,000,000.00	3,000,000.00	0.74%	3.72%
Commonwealth Bank	22/11/2023	AA-	5,000,000.00	5,000,000.00	1.24%	4.19%
Commonwealth Bank	28/03/2024	AA-	3,000,000.00	3,000,000.00	0.74%	2.43%
Commonwealth Bank	15/08/2024	AA-	3,000,000.00	3,000,000.00	0.74%	5.57%
Commonwealth Bank	12/12/2024	AA-	10,000,000.00	10,000,000.00	2.48%	4.63%
Commonwealth Bank	13/01/2025	AA-	5,000,000.00	5,000,000.00	1.24%	4.63%
Commonwealth Bank	27/11/2025	AA-	10,000,000.00	10,000,000.00	2.48%	4.60%
ING Bank	05/08/2025	A	3,000,000.00	3,000,000.00	0.74%	5.30%
ING Bank	01/09/2025	A	3,000,000.00	3,000,000.00	0.74%	5.37%
ING Bank	24/09/2025	A	5,000,000.00	5,000,000.00	1.24%	5.20%
ING Bank	25/09/2026	A	5,000,000.00	5,000,000.00	1.24%	5.15%
G & C Mutual Bank	17/09/2025	BBB	3,000,000.00	3,000,000.00	0.74%	5.20%
Great Southern Bank	23/04/2024	BBB	3,000,000.00	3,000,000.00	0.74%	5.12%
Great Southern Bank	29/07/2024	BBB	3,000,000.00	3,000,000.00	0.74%	5.24%
Members Equity Bank	22/12/2023	BBB	5,000,000.00	5,000,000.00	1.24%	1.20%
NAB	30/05/2024	AA-	5,000,000.00	5,000,000.00	1.24%	5.02%
NAB	20/10/2023	AA-	5,000,000.00	5,000,000.00	1.24%	4.51%
NAB	30/05/2024	AA-	5,000,000.00	5,000,000.00	1.24%	3.49%
NAB	25/06/2024	AA-	5,000,000.00	5,000,000.00	1.24%	5.20%
NAB	13/09/2024	AA-	5,000,000.00	5,000,000.00	1.24%	1.10%
NAB	08/09/2025	AA-	5,000,000.00	5,000,000.00	1.24%	0.82%
Northern Territory Treasury	16/12/2024	AA-	5,000,000.00	5,000,000.00	1.24%	1.00%
Northern Territory Treasury	15/12/2025	AA-	5,000,000.00	5,000,000.00	1.24%	1.20%
Northern Territory Treasury	15/12/2026	AA-	5,000,000.00	5,000,000.00	1.24%	1.50%
P&N Bank	22/12/2023	BBB	5,000,000.00	5,000,000.00	1.24%	1.20%
Westpac	22/12/2023	AA-	10,000,000.00	10,000,000.00	2.48%	1.25%
Westpac	03/10/2023	AA-	2,000,000.00	2,000,000.00	0.50%	4.20%
Westpac	17/10/2023	AA-	5,000,000.00	5,000,000.00	1.24%	4.44%
Westpac	20/10/2023	AA-	8,000,000.00	8,000,000.00	1.98%	4.57%
Westpac	20/11/2023	AA-	10,000,000.00	10,000,000.00	2.48%	4.60%
Westpac	25/03/2024	AA-	3,000,000.00	3,000,000.00	0.74%	2.39%
Westpac	31/05/2024	AA-	5,000,000.00	5,000,000.00	1.24%	3.54%
			190,000,000.00	190,000,000.00	47.12%	
Total			399,162,546.25	396,678,128.91	98.38%	

T-Corp

NSWTC IM Long Term Growth Fund	Unrated	6,125,337.88	6,520,755.70	1.62%
		6,125,337.88	6,520,755.70	1.62%
Total		399,162,546.25	396,678,128.91	98.38%
Portfolio Total		405,287,884.13	403,198,884.61	100.00%

CORP 03

Annual Financial Reports 2022-23

Strategic Direction	Leading through Collaboration Strive for best practice in all Council processes
File Ref	341853.2023
Report By	Vishwa Nadan - Chief Financial Officer
Approved By	Farooq Portelli - Director Corporate Support

EXECUTIVE SUMMARY

Council has a regulatory obligation to prepare and present audited financial reports to the Office of Local Government (due on or before 31 October 2023) and to the Community.

Council's general-purpose financial statements for the year ended 30 June 2023 have been prepared and audited by NSW Audit Office.

This paper seeks Council's endorsement and a resolution authorising issue of the financial statements.

NSW Audit Office staff will be present at the Council Meeting to answer any questions.

RECOMMENDATION

That Council:

1. Receives and endorses the 2022-23 audited financial reports;
2. Authorises the Mayor, Deputy Mayor, Chief Executive Officer and the Responsible Accounting Officer (Chief Financial Officer) to sign the prescribed statement that will form part of the financial reports;
3. Authorises the Chief Executive Officer to:
 - a) forward a copy of the financial reports together with the auditor's report to the Office of Local Government in accordance with Section 417(5) of the Local Government Act 1993;
 - b) issue a public notice containing a summary of financial results and put the financial statements on exhibition for 7 days to seek public submissions;
 - c) Note that the financial statements and a summary of public submissions received will be presented to Council at its next meeting for consideration and adoption.

REPORT

Legislative Requirements

The Local Government Act 1993 states:

As soon as practicable after a council receives a copy of the auditor's reports:

- It must fix a date for the meeting at which it proposes to present its audited financial reports, together with the auditor's reports, to the public, and
- It must give public notice of the date so fixed [Section 418 (1)]
- The date fixed for the meeting must be at least 7 days after the date on which the notice is given, but not more than 5 weeks after the auditor's reports are given to the council. [Section 418 (2)]

Council's general-purpose financial statements for the year ended 30 June 2023 have been prepared.

Council's auditors, NSW Audit Office, have audited the financial statements and will issue an unqualified audit certificate after receiving a signed "Statement by Councilors and Management" following this Council meeting.

The financial statements were reviewed and endorsed by the Audit Risk and Improvement Committee.

This paper seeks Council's endorsement and a resolution authorising issue of the financial statements. A complete set of draft general/ special purpose financial statements and special schedules are provided as Attachment 1.

NSW Audit Office staff will be present at the Council Meeting to answer any questions.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	There are no social and cultural considerations.
Civic Leadership	Operate a well-developed governance system that demonstrates accountability, transparency and ethical conduct.
Legislative	Division 2 of the Local Government Act 1993

Risk	Financial risk management issues are included in the financial statements
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ATTACHMENTS

Nil

OPER 01

**Proposed Waste Precinct - Resolutions 27th
September 2023**

Strategic Objective	Liveable, Sustainable, Resilient Deliver a beautiful, clean and inviting city for the community to enjoy
File Ref	343369.2023
Report By	Jason Breton - Director Operations
Approved By	John Ajaka - Chief Executive Officer

EXECUTIVE SUMMARY

The Council made three resolutions on receiving the 27th of September 2023 Report, CONF6 – Proposed Waste Precinct, the first being to receive and acknowledge said report.

The second and third resolutions arrived from a general waste discussion and were:

- Logistics and costings for additional waste services over the Christmas period 2023
- The frequency of waste collections as they relate to Ibis bird activity and mitigation

The cost of approving these additional resolutions is circa \$160K.

RECOMMENDATION

That Council acknowledge the responses to two related but not directly associated matters arriving from CONF6 – Proposed Waste Precinct.

REPORT

In response to the second resolution pertaining to the logistics of and costings for additional waste services over the Christmas period 2023, the Director of Operations provides the following response.

Operations can add additional recycling collections: (Yellow Bins)

- Christmas week (week commencing 25/12/23) – services are to the scheduled area only
- The New Years week (commencing 01/01/24) – all areas will be serviced (i.e. the scheduled week plus the previous week)
- The week commencing 08/01/24 – again all areas will be serviced (that is, week's A and B)
- The week commencing 15/01/24 – resume normal collections for scheduled area only

Thus;

- The Zones that have their Yellow bins collected during the week commencing 25th December 2023 will have an additional collection the week after which is 1st January 2024.
- The Zones that have their Yellow bins collected during the week commencing 8th January 2024 will have an additional collection the week after which is 15th January 2023.

The additional cost for Council to consider for these 2 additional weeks of collections is estimated at \$160,000.00.

1. \$150,000.00 – JJ Richards
2. \$10,000.00 – Visy Tipping.

In response to the third resolution pertaining to the frequency of waste collections as they relate to Ibis bird activity and mitigation, the Director of Operations provides the following response.

The Operations Directorate will continue to investigate contemporary options to mitigate the effects of Ibis birds, particularly their discharge, within the CBD (primarily in the vicinity of Liverpool Railway Station).

Mitigations may include acoustic solutions.

The selection of trees, shrubs and plants of species that are unattractive to Ibis birds are also being procured for future planting locations.

Where litter is the root cause of localized attraction of Ibis birds, Operations Directorate advises that all public litter bins in the CBD receive servicing by our dedicated crews from Monday through Sunday.

Regarding Multi-Unit Dwellings (MUDS), Operations Directorate conduct weekly servicing on their designated collection days as per the schedule for red and yellow bins.

Should any concerns or issues arise pertaining to Ibis birds and bins in the vicinity of Multi-Unit Dwellings, our Waste Education teams are readily available to collaborate with Building Managers and Strata to address challenges related to overflowing bins, recycling management, and to explore the utilisation of our Community Recycling Centre as a means to reduce waste."

We have provided strategic advice to Strata Managers regarding Ibis birds to prevent them from pulling out waste.

If Councilors are contacted with specific issues relating to Ibis birds and waste, the Operations Directorate advise that any Multi Unit Dwelling resident may contact our Waste Team via Customer Service so that we can review the site in question and offer suggestions to prevent this from occurring in future.

FINANCIAL IMPLICATIONS

Costs associated with this additional service offering have not been included in Council's budget for the current year.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	There are no social and cultural considerations.
Civic Leadership	There are no civic leadership and governance considerations.
Legislative	There are no legislative considerations relating to this report.
Risk	There is no risk associated with this report.

ATTACHMENTS

Nil

OPER 02

Wianamatta South Creek Flood Study Update

Strategic Objective	Liveable, Sustainable, Resilient Manage stormwater and drainage infrastructure to mitigate risk to the environment and the community
File Ref	344485.2023
Report By	Maruf Hossain - Coordinator Floodplain and Water Management
Approved By	Jason Breton - Director Operations

EXECUTIVE SUMMARY

Council, at its meeting of 31 March 2021, resolved to defer a decision on whether to adopt the NSW Government's Wianamatta South Creek (WSC) Flood Study 2020, until such time as the following activities are undertaken:

- The latest flood event is adequately assessed by independent consultants in relation to the proposed flood study;
- Investigate illegal fill and undertake flood mitigation works in the areas covered by the draft flood maps; and
- Look at current flood maps based on the local history, going back to the 2019 flood, and consult with the local community about how this relates to the existing flood maps and provide a further report to Council.

The purpose of this report is to provide an update on these activities, and recommendations regarding next steps, for consideration by Council.

To address the above-mentioned points, the flood model used to prepare the WSC Flood Study 2020 has been reviewed and a flood modelling analysis of recent historical flood events has been completed, by independent consultant, Manly Hydraulics Laboratory (MHL).

The results of the modelling demonstrate that the extent of flood inundation in recent floods (i.e. since 2019) is generally lower than the design 1%AEP (1 in 100 year) flood extent that is identified in the WSC Flood Study 2020. It was found that the February 2020 flood was the largest among the four (4) recent historical floods within South Creek catchment, and was within proximity of 1%AEP design flood extent.

The community within the flood affected area has been consulted on the outcomes of the flood impact assessment, at the Aerotropolis Community Consultative Committee (ACCC) meeting

held on 18 July 2023, and at a public meeting at the Bringelly Community Centre held on 12 September 2023.

Through this consultation, members of the flood affected community have expressed lack of confidence around the accuracy of the flood modelling and the validity of historical flood data used to inform the NSW Government's WSC Flood Study 2020. They have also expressed concern regarding the accuracy of the flood extent mapping of recent flood events, in comparison to their experience of the flooding that occurred during those events. The general consensus from the flood affected community, was that they believe the extent of flood prone land will be significantly reduced, following the completion of various flood mitigation works that are currently underway, within the Wianamatta South Creek catchment.

As such, it is recommended that Council continues to defer adoption of the NSW Government's WSC Flood Study 2020, until the above-mentioned flood mitigation works are completed, and a subsequent review of Council's South Creek Flood Study (2004) is completed.

The purpose of the review is to compare the extent of flood prone land identified in Council's South Creek Flood Study (2004), with updated mapping that would factor in the various flood mitigation works that will be completed. It is anticipated that the review would be funded through the NSW Government's Floodplain Management Program.

It is expected that it will take approximately 18 – 24 months for the above-mentioned flood mitigation works and update to Council's existing South Creek Flood Study, to be completed. Following this, a further report will be presented to Council, on the outcome of the review of Council's South Creek Flood Study.

RECOMMENDATION

That Council:

1. Defers adoption of the NSW Government's Wianamatta South Creek (WSC) Flood Study 2020;
2. Undertakes a review of its existing South Creek Flood Study, following completion of the flood mitigation works that are underway within the catchment;
3. Prepares a further report to Council, on the outcomes of the review; and
4. Notifies property owners and residents within the flood affected area, of Council's decision.

REPORT

1. Background

In 2020, the NSW Government prepared the Wianamatta South Creek (WSC) Flood Study 2020, which is a broad catchment-wide flood study, intended to inform planning decisions within the WSC catchment area. The WSC Flood Study was provided to Council, to consider for adoption. Council's existing South Creek Flood Study was adopted by Council in 2004, and has continued to play an important role in guiding decisions related to flood risk management and flood related development controls, within the WSC catchment. However, the NSW Government's WSC Flood Study 2020 provided Council with an opportunity to update and re-align its flood mapping, with the most up to date and current flood related information available.

Extensive consultation was undertaken with the flood-affected community, to seek feedback on the NSW Government's WSC Flood Study 2020. Following community consultation, a detailed report was presented to Council, at its meeting on 31 March 2021, for a decision on whether to adopt the WSC Flood Study 2020. Council subsequently resolved to defer adoption of the WSC Flood Study 2020, until such time as the following activities are undertaken:

- The latest flood event is adequately assessed by independent consultants in relation to the proposed flood study;
- Investigate illegal fill and undertake flood mitigation works in the areas covered by the draft flood maps; and
- Look at current flood maps based on the local history, going back to the 2019 flood, and consult with the local community about how this relates to the existing flood maps and provide a further report to Council.

The purpose of this report is to provide an update on these activities, and recommendations regarding next steps, for consideration by Council.

To address the above-mentioned points, the flood model used to prepare the WSC Flood Study 2020 has been reviewed and a flood modelling analysis of recent historical flood events has been completed, by independent consultant Manly Hydraulics Laboratory (MHL). The findings of this review and analysis are detailed below.

2. Outcomes of the assessment of recent historical floods

MHL has reviewed the flood model that was used to prepare the WSC Flood Study 2020, and completed a flood modelling analysis of recent historical flood events. The results of the four historical events since 2019 were compared to recorded water levels at South Creek at the Elizabeth Drive gauge, which is located upstream of Elizabeth Drive bridge, and is managed by Water NSW. The modelling results have been mapped and compared with flood maps of various design flood events, including the 5%AEP (1 in 20 year), 2%AEP (1 in 50 year) and the 1%AEP (1 in 100 year) design flood events.

The assessment demonstrates that the extent of flood inundation under the recent floods (i.e. since 2019) is generally lower than the design 1%AEP (1 in 100 year) flood. It was also found that the February 2020 flood was the largest among the four (4) recent historical floods in South Creek catchment area, and within proximity of 1%AEP design flood extent.

3. Ground truthing of historical floods and topographical data

Land survey of several properties located along Kelvin Park Drive was undertaken, to ground-truth the elevation data used in the WSC Flood Study 2020. The surveyed data was compared to the latest light detection and ranging (LiDAR) elevation data, used in the WSC Flood Study 2020. It is noted that the LiDAR and survey data are generally consistent, with differences being typically less than 150mm. Given the minimal difference in levels between the two sources, the elevation used in the WSC Flood Study 2020 flood model, appears appropriate for the purpose of flood modelling.

As part of ground truthing, Council also distributed letters to owners and residents within flood affected areas, seeking information on their experience of recent historical floods. A total of 26 responses were received. Some of the respondents noted they believed that recent upgrades and developments in the catchment have reduced the levels of flooding occurring. These improvements include the detention basin constructed within the new Western Sydney (Nancy-Bird Walton) International Airport site, which is capturing additional flood water. It also includes upgrades (which incorporate new drainage infrastructure) constructed as part of the Bringelly Road Upgrade works, and other flood mitigation works undertaken within the Camden Council Local Government Area (LGA).

4. Community consultation and outcomes

The community within the flood affected area has been consulted through various engagement activities undertaken between 10 August and 30 November 2020, to gather feedback to help Council make a decision whether to adopt the NSW Government's WSC Flood Study. Owners and residents of flood affected properties were consulted on the outcomes of the flood impact assessment and their experience in recent flood events, through the Aerotropolis Community Consultative Committee (ACCC) meeting held on 18 July 2023, and at a public meeting at the Bringelly Community Centre, held on 12 September 2023.

Through this consultation, members of the flood affected community have expressed lack of confidence around the accuracy of the flood modelling. Consultants (representing residents) queried the accuracy of the model calibration, hydrology information, and use of historical flood data. Members of the community also expressed concern regarding the accuracy of the mapped extent of recent flood events, in comparison to their experience of the flooding that occurred during those events. Details of this community consultation were included in the Council Report for the Wianamatta South Creek Flood Study, which was presented to Council in March 2021 ([attached](#)).

5. Conclusion

It has been determined that the variations in the flood extents between the existing maps (i.e. within the Council adopted South Creek Flood Study 2004) and the new flood maps (i.e. within

the NSW Government's WSC Flood Study 2020) are mostly attributable to higher levels of accuracy in the topographical data, that has been used to inform the WSC Flood Study 2020. There has been significant advancement, innovation and improvement in topographical survey and modelling techniques, which has resulted in the capturing of more accurate data, to assist land use planning activities and the management of flood risks arising from occupation of flood prone lands.

However, it is acknowledged that the community has expressed lack of confidence around the accuracy of the flood modelling and the model calibration, hydrology information, and mapping of recent flood events that have occurred since 2019.

In addition to the above, significant flood mitigation works are currently underway within the Wianamatta South Creek catchment area. This includes works upstream of Bringelly Road (i.e. within the Camden LGA), flood detention basins being constructed within the new Western Sydney (Nancy-Bird Walton) International Airport site, and works being undertaken in the Mamre Road precinct. Cumulative impacts of these flood mitigation works need to be assessed, as they are likely to impact the extent of flood prone lands.

It is also noted that the NSW Government has recently released its Flood Risk Management Manual 2023, which includes updated best practice information on managing the occupation of flood prone lands.

For these reasons, it is recommended that Council continues to defer adoption of the NSW Government's WSC Flood Study 2020. It is also recommended that Council undertakes a review of its existing South Creek Flood Study 2004, once the above-mentioned flood mitigation works that are being carried out, are completed. The purpose of the review is to compare the extent of flood prone land identified in Council's existing South Creek Flood Study 2004, with updated mapping that would factor in the various flood mitigation works that will be completed. It is anticipated that the review would be funded through the NSW Government's Floodplain Management Program.

It is expected that it will take approximately 18 – 24 months for the above-mentioned flood mitigation works and review of Council's South Creek Flood Study 2004 to be completed. Following this, a further report will be presented to Council on the outcome of the review.

FINANCIAL IMPLICATIONS

Costs associated with this recommendation are outside of Council's current budget and long-term financial plan. The impact on the budget and long-term financial plan are outlined in the table below.

	2021/22	2022/23	2023/24	2024/25	2025/26
Operating budget / LTFP impact					75,000
Capital budget impact					
Ongoing unbudgeted impact to opex from capital expenditure					
Unbudgeted impact to unrestricted cash					
Funding source					Stormwater Service Charge

CONSIDERATIONS

Economic	Deferring a decision on whether to adopt the Wianamatta South Creek Flood Study 2020 will not have a direct economic or financial impact on Council.
Environment	Providing the community with increased confidence in relation to flood mitigation and their properties.
Social	Preserving and maintaining social welfare and minimising public risk, associated with floods.
Civic Leadership	Encouraging the community to engage in Council projects and initiatives.
Legislative	Ensuring compliance with the NSW Flood Prone Land Policy and consistency with the NSW Flood Risk Management Manual 2023. Ensuring compliance with Section 733 of the Local Government Act.
Risk	Ensuring the most accurate and up to date information is used, to responsibly mitigate flood risk to the community.

ATTACHMENTS

1. Wianamatta South Creek Flood Study Update

INF 01	Wianamatta South Creek Flood Study Update
Strategic Direction	Strengthening and Protecting our Environment Develop, and advocate for, plans that support safe and friendly communities
File Ref	071829.2021
Report By	Madhu Pudasaini - Manager Technical Support
Approved By	Raj Autar - Director City Infrastructure and Environment

EXECUTIVE SUMMARY

Council, at its meeting of 29 July 2020, resolved to publicly exhibit the updated Wianamatta South Creek (WSC) Flood Study and associated flood maps for community information and feedback. At this meeting, Council also resolved to receive a further report following conclusion of the exhibition period to adopt the Flood Study and associated flood maps for the WSC catchment.

Drivers for updates to flood study

The existing South Creek Flood Study was adopted by Council in 2004 following a detailed flood study and community consultation. While this study has played an important role in assisting Council manage flood risks within the WSC catchment, a more recent initiative by the NSW Government to undertake a broader catchment wide flood study to inform planning of the WSC catchment provided Council an opportunity to update and align its flood mapping with the most current flood related information.

Further, over the last three years and at numerous forums, residents from the WSC catchment have repeatedly expressed concerns regarding Council's continued reliance on the 2004 flood study for planning decisions, which in their view was outdated and did not reflect changes in the catchment.

In view of resident concerns and the age of the existing flood study, the NSW Government's flood study provided Council a unique opportunity to develop a better understanding of the flooding characteristics of Wianamatta South Creek.

Community consultation

Council commenced a comprehensive community engagement process in August 2020, which included a range of consultation activities undertaken generally between 10 August and 30 November 2020. The consultation process included:

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

- Exhibition and provision of the flood study report and the corresponding updated flood maps via Council's website.
- Display and provision of maps and reports to the residents at Council libraries and Local Post Offices.
- Presentations and briefings to residents and other stakeholders at numerous community forums.
- Presentations and briefings to Council's Environment Advisory Committee (EAC) on a regular basis.
- Face to face meetings with individual property owners over a two-day period in early November 2020 at the Bringelly Community Centre.
- Numerous phone meetings and video conferences to further clarify study results to residents and stakeholders.

Consultation outcomes

Upon conclusion of the public exhibition process, a total of 140 submissions were received. Most submissions were from residents whose properties are already affected by flooding. Council also received submissions from public authorities, planners and flood engineers representing some of the residents.

Information received during the public consultation process was carefully analysed, and where necessary, incorporated in the study to update the flood maps. The assessment report covering all the submissions has been tabulated in section 5 of this report.

Council considers that while the full range of flooding related concerns and issues highlighted during the consultation process are valid, a detailed assessment has shown that changes to the flood extents are a result of significant innovations and improvements in topographical survey and modelling techniques and not changes within the catchment.

The flood extents resulting from the new study are generally consistent with the current flood maps (2004), however, some variations have been noted around the flood fringe areas. Further modelling was undertaken based on information gathered during the consultation process, which has resulted in minor changes to the proposed flood extents. The updated flood extent maps are attached as Attachment C & D for Council endorsement.

The following summarises the changes to flood impacts on properties within the catchment arising from moving to adopt the new flood maps (when compared with existing flood maps) in a 1% AEP flood:

- a) 71 flood affected properties will be completely relieved from flooding.
- b) 480 flood affected properties will be partially relieved from flooding.
- c) 317 flood affected properties will experience some increases to flooding.

d) 33 flood free properties will now become partially flood affected.

The flood study and associated flood maps are generally prepared and updated using the methods prescribed in the NSW Floodplain Development Manual (2005). Information used to update the flood maps are the best available information at the time to assist land use planning and managing flood risks arising from occupation of flood prone lands. This also ensures that Council's approach to managing flood risks is consistent with requirements of Section 733 of the Local Government Act relating to acting in good faith.

Following a comprehensive review of flood modelling and study, and an extensive public consultation process, this report recommends that Council endorses the updated Wianamatta South Creek Flood Study 2020 and associated flood extent maps to guide future planning of this important corridor.

RECOMMENDATION

That Council:

1. Adopts the Wianamatta South Creek Flood Study and associated flood maps.
2. Notifies all respondents of Council's decision.

REPORT

1. Background

Liverpool LGA is traversed by two major river systems namely the Georges River and the Hawkesbury-Nepean River. Most of the western parts of the LGA fall within the Wianamatta South Creek catchment, which is a major contributory catchment of the Hawkesbury-Nepean River system. Catchments of the adjoining Kemps Creek and Badgerys Creek also drain through the Wianamatta South Creek to ultimately discharge into the Hawkesbury River near Windsor.

Council has adopted flood studies and associated flood maps for all its major rivers and creek systems to guide the planning and development of flood prone lands in accordance with the NSW Government's Flood Prone Land Policy. The current Wianamatta South Creek Flood Study (South Creek Flood Study) was adopted by Council in 2004 following a detailed flood study and community consultation.

2. Drivers for updates to flood study

While the 2004 study has continued to play an important role in guiding flood risk management and flood related development controls within the WSC catchment, a more recent initiative by the NSW Government to undertake a broader catchment wide flood study to inform planning

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of the WSC catchment provided Council an opportunity to update and align its flood mapping with the most current flood related information.

Further, over the last three years and at numerous forums, residents from the WSC catchment have repeatedly expressed concerns regarding Council's continued reliance on the 2004 flood study for planning decisions, which in their view was outdated and did not reflect changes in the catchment.

In view of resident concerns and the age of the existing flood study, the NSW Government's flood study provided Council a unique opportunity to develop a better understanding of the flooding characteristics of Wianamatta South Creek.

The new flood study uses the most current topographical information with significantly improved accuracy that was not available at the time of adopting the flood maps in 2004. The new flood study also includes some additional areas of the Badgerys Creek and Thompsons Creek catchments, which were not previously included in the flood studies and mapping. In addition, the study uses two-dimensional hydraulic modelling technique that represents far better flood behavior compared to the one-dimensional modelling technique used in the 2004 flood maps.

3. Outcomes of the updated flood study

The flood extents resulting from the new study are generally consistent with the current flood maps (2004), however, some variations have been noted around the flood fringe areas. Further modelling was undertaken based on information gathered during the consultation process, which has resulted in minor changes to the proposed flood extents. The updated flood extent maps are attached as Attachments A to D and includes flood maps for the 1% Annual Exceedance Probability (AEP) and Probable Maximum Flood (PMF) scenarios.

(The 1% AEP, which is also referred to as the 100-year flood, has a 1% or 1 in 100 chance of occurring in any one year, whereas the PMF represents the largest flood that could conceivably occur at a particular location.)

The following summarises the changes to flood impacts on properties within the catchment arising from adopting the new flood maps (when compared with existing flood maps) in a 1% AEP flood as shown in Attachment A:

- a) 71 flood affected properties will be completely relieved from flooding *(shown purple)*.
- b) 480 flood affected properties will be partially relieved from flooding *(shown purple)*.
- c) 317 flood affected properties will experience some increases to flooding *(shown orange)*.
- d) 33 flood free properties will now become partially flood affected *(shown orange)*.

Flood study and mapping of the Badgerys Creek and Upper Thompsons Creek catchments show that up to 49 properties are partially affected by flooding under the 1 % AEP. Similarly,

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the following shows changes to flood impacts on properties within the catchment arising from the new flood maps under the PMF scenario, and is shown in Attachment B:

- a) 175 flood affected properties will be completely relieved from flooding (*shown purple*).
- b) 558 flood affected properties will be partially relieved from flooding (*shown purple*).
- c) 229 flood affected properties will experience increased flooding (*shown orange*).
- d) 25 flood free properties will now become partially flood affected (*shown orange*).

As for the 1% flood event, the PMF flood mapping for the Badgerys Creek and Upper Thompsons Creek catchment shows that 60 properties are affected by the PMF event.

4. Community consultation and outcomes

Council commenced a comprehensive community engagement process in August 2020, which included a range of consultation activities undertaken generally between 10 August and 30 November 2020. The consultation process included:

- Exhibition and provision of the flood study report and the corresponding updated flood maps via Council's website.
- Display and provision of maps and reports to the residents at Council libraries and Local Post Offices.
- Presentations and briefings to residents and other stakeholders at numerous community forums.
- Presentations and briefings to Council's Environment Advisory Committee (EAC) on a regular basis.
- Face to face meetings with individual property owners over a two-day period in early November 2020 at the Bringelly Community Centre.
- Numerous phone meetings and video conferences to further clarify study results to residents and stakeholders.

Upon conclusion of the public exhibition process, a total of 140 submissions were received. Most submissions were from residents whose properties are already affected by flooding. Council also received submissions from public authorities, planners and flood engineers representing some of the residents.

Information received during the public consultation process was carefully analysed, and where necessary, incorporated in the study to update the flood maps. The assessment report covering all submissions has been tabulated in Section 5 below.

Generally, the submissions focused on the six issues highlighted below. These issues and concerns are also assessed and discussed in the table in Section 5 below:

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

- a) Flooding impacts arising from upstream development - residents felt that increased urbanisation and developments within the upper (Camden) catchment are the major causes of any increased flooding within the WSC catchment.
- b) Flooding impacts arising from recent widening of culverts across Bringelly Road by TfNSW - the expanded capacity of the culverts feeding the WSC is seen as a source of increased flood flows and velocity.
- c) Unauthorised land filling activities along sections of Kemps Creek, Thompsons Creek and South Creek - the land filling activities over time is seen to be having a major impact on flood flows and flood extents.
- d) Lack of confidence around the flood modelling - consultants representing residents queried the accuracy of model calibration, hydrology and use of historical flood data.
- e) Concerns regarding the accuracy of topographical data - residents have queried the accuracy of the topographical data used to define the landform.
- f) Flooding impacts arising from a lack of appropriate management of South Creek - lack of creek maintenance over time was also seen as contributing to the changes to flood extents.

Council considers that while the above concerns are generally valid, the detailed assessments below has shown that changes to the flood extents are a result of significant innovations and improvements in topographical survey and modelling techniques and not changes within the catchment.

5. Evaluation of submissions

The table below provides the details of the concerns raised in the submissions and Council's response to them.

Key Issues	Details of Issues	Council Officer Response
Flooding impacts are arising from upstream development	1. Increased flows due to new developments in Camden LGA are adversely affecting flooding of properties at downstream of Bringelly Road.	<p>Wianamatta South Creek Flood Study (2020) aims to review and update flood levels and flood extent mapping of 1% AEP and PMF, which are very rare and significantly large flood events.</p> <p>Council acknowledges that substantial new release areas are being progressively developed in the upper catchment within Camden LGA. Further, it is also acknowledged that without appropriate stormwater management measures/controls in place, peak flood flows are likely to increase and would have detrimental impacts on downstream properties. However, Camden City Council has confirmed that appropriate stormwater managements measures have been incorporated in the new development areas to ensure the stormwater exiting the sites are controlled to pre-development condition.</p> <p>The peak design flow determined for 1%AEP event downstream of Bringelly Road for the Wianamatta South Creek in 2004 flood study is 299 m³/s, which closely aligns with the 305 m³/s peak design flow determined for</p>

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

Key Issues	Details of Issues	Council Officer Response
		2020 flood study at the same location. While some contribution from the development activities are unavoidable, this small increase in the peak flow is mainly due to better delineation of the catchment boundaries, refinement of the sub-catchment, improvement in the reliability of the catchment input data and improved reliability in estimating impervious areas in the catchment, and is unlikely to be the cause of changes to flood extents downstream.
	2. Increase in flood extents of some properties within the catchment is a consequence of failure by council to manage stormwater adequately.	The increase in flood extents in some area are almost entirely the result of new and more reliable topographic data becoming available and being relied upon in the mapping of flood extents. The 2004 flood extents for the 1% AEP event were produced using contours of land surface extracted from 1:4,000 and 1:10,000 orthophoto mapping, which is reported as having a vertical accuracy of ± 0.5 m or ± 1.0 m. LiDAR (Light Detection and Ranging) data used in 2020 study has accuracy of ± 0.15 m. LiDAR is a unique remote sensing technology that uses light in the form of lasers to measure distances and use it to create exceptionally precise three-dimensional topographical information.
	3. Properties at downstream of Bringelly Road are experiencing more frequent flooding.	Council notes that the Sydney basin including the Wianamatta South Creek has experienced more frequent flooding in the recent years including in 2015, 2016 and more recently in 2020. More frequent flooding is due to more intense rain events that the Sydney basin is experiencing over the recent years.
Flooding impacts are arising from recent widening of culverts across Bringelly Road by TfNSW.	1. Culvert upgrade works at Bringelly Road would have resulted in increased flooding of downstream properties.	As part of the Bringelly Road upgrading works, South Creek crossing at Bringelly Road has been upgraded. The Review of Environmental factors (REF) for the Bringelly Road upgrading works demonstrated that it has adopted the peak 1 in 100-year flow from the 2004 South Creek Flood Study for the design of the upgraded culvert.
	2. Flood model to be reviewed and all key drainage structures to be included in the model.	The flood model has been reviewed and extended approximately 800 metres upstream of Bringelly Road using the recently acquired topographic data and details of structures such as bridges and culverts which could act as hydraulic controls during major flooding. The results are similar to the original results with flood affection unchanged.
Unauthorised land filling activities along sections of Kemps Creek, Thompsons Creek and South Creek	1. Illegal land filling at four (4) locations along South Creek, Thompson Creek and Kemps Creek would have worsened flooding of properties.	Council has undertaken flood impact assessments of the alleged illegal land fillings indicated in the submissions. The assessment demonstrated that the impacts of filling are localised and contained within the close vicinity of the filling. Analysis of alleged illegal filling on Thompson Creek demonstrated that impacts of filling is fully contained within the property and no adjoining property will be adversely affected.

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

Key Issues	Details of Issues	Council Officer Response
	2. Requested council actions on alleged illegal filling within the floodplain.	Council has initiated investigations to address the issues with the alleged illegal fillings. Council will take appropriate action once the investigation is completed.
Lack of confidence around the flood modelling	1. There is significant increase in flow in 2015 study in comparison to 2004 study. Peak 1 in 100-year flows is higher than previous studies.	The adopted peak flow in the updated study is 305 m ³ /s, which is similar to the peak flow of 299 m ³ /s adopted in 2004 study for 1%AEP. The increase is attributed to various improvements in the current modelling as explained previously in this report. Further technical details are provided in Attachment E.
	2. The flow estimation modelling is based on 1987 Australian Rainfall and Runoff (ARR) methodology rather than the latest ARR 2019 guidelines.	The methodology adopted for estimation of peak flows for application in the flood modelling are in accordance to the ARR 2019 guideline and in consistent to approach Council has taken for peak flow estimation across the LGA. Further details are provided in Attachment E the flood study report (Attachment F).
	3. The upstream model inflow boundary location is at Bringelly Road, which may have overestimated flood levels at downstream. Flood model setup is not appropriate	The two-dimensional hydraulic model used in the study generally takes care of any potential anomalies in the flow distribution from the upstream boundary conditions. To confirm this, the flood model has been reviewed and updated with boundary condition extended approximately 800 metres upstream of Bringelly Road using the recently acquired topographic data and details of structures such as bridges and culverts which could act as hydraulic controls during major flooding. The results are similar to the original results with flood affectation unchanged. Further technical details are provided in Attachment E.
	4. The flood model is not sufficiently calibrated against local historical flood data.	Validation of the flood model by comparison of the 1% AEP flood surface generated from the modelling undertaken in 1990 / 1991 as part of the original flood and floodplain management studies was considered acceptable and reasonable by Council. Further details are provided in Attachment E.
	5. The flood model needs to be validated against previously calibrated model.	As explained above, the model has been validated as necessary.
	6. The RMA-2 model predicts flood levels that are approximately 0.4 to 0.5m higher than the levels in the 2004 study	Comparison of flood levels predicted by one and two-dimensional flood models such as the 2004 MIKE-11 and 2020 RMA-2 models can be misleading. Further details are provided in Attachment E.
Concerns regarding the accuracy of topographical data	1. Properties not previously affected by the 2004 flood study have become flood affected land under the new flood mapping.	The 2004 flood extents were based on contours derived from orthophoto mapping that was generated in the late 1970s and early 1980s with a vertical accuracy of ± 0.5 m. The contour intervals adopted in the 2004 study was 2 metres. Although the input data to the 2004 flood study was appropriate when adopted, there have been

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

Key Issues	Details of Issues	Council Officer Response
	Landform has not been changed.	<p>substantial changes to the catchment and floodplain over the intervening period, along with significant improvements to the reliability of available input data and modelling techniques.</p> <p>The current flood study is based on the latest topographical data captured in 2019 using LiDAR technology. Moreover, the current flood mapping is based on a 0.5m control interval. The combined application of more precise topographical data (LiDAR 2019) and more close contour intervals have produced most reliable flood extent mapping.</p> <p>Therefore, the change in the flood affectation observed in the 2020 flood study is mainly due to the better representation of the topography in the flood model compared to the topography represented in the 2004 flood study.</p>
	2. Some lands are affected by drainage easement not flooding from the creek. Newly affected properties are due to overland flow.	As outlined above, the new flood mapping is based on very accurate topographical data, which was not available in 2004. During a 1%AEP flood creek banks overtop, and the low-lying overland flow paths and drainage channels become impacted by backwater effects.
	3. Flood maps to be reviewed and amended incorporating land survey data provided during the submission.	Flood maps have been reviewed and updated as appropriate. The updated flood maps represent the most up to date landform data available.
Flooding impacts arising from a lack of appropriate management of South Creek	1. Creeks are blocked due to accumulation of rubbish and dense vegetation.	Council acknowledges that the maintenance of creek has been an issue for the residents. Creek maintenance has been a complex issue due to the multi-agency responsibility associated with the ongoing management. Council has made representation to relevant State agencies in the past to provide clear direction and take appropriate action to resolve this issue. It is encouraging that the State Government has committed to develop Creek Management Strategy as part of its planning for the development of Western Sydney Aerotropolis.
	2. Flooding should have been improved if creeks are appropriately maintained.	While council acknowledges that the ongoing maintenance of the creek is an issue, presence of vegetation and rubbish have very little or no effect on flood extent during much larger and rare events such as 1%AEP or PMF. This is due to the presence of high volume of water at a higher velocity during these rare flood events.
Other general Concerns	1. Residents are concerned about the timing of new flood study.	Latest topographical data using LiDAR technology was available in mid-2019. Council became aware of the need to update flood maps with the latest data when latest LiDAR based topographical data was used to analyse the flood event of February 2020. As per the intent of Section 733 of the Local Government Act and

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

Key Issues	Details of Issues	Council Officer Response
		the requirements prescribed in the NSW Flood Development manual, Council initiated the process of adopting the new flood maps to facilitate better forecasting of flood risks, so that it can provide far accurate flooding related advice.
	2. It is recommended that Council wait to adopt the new maps until the completion of rezoning process.	NSW Government has rezoned the land within the South Creek catchment and Western Sydney Aerotropolis based on the 2004 flood maps.
	3. Devaluation of the properties due to increased flood extent in the new flood maps and proposed rezoning.	Council notes this concern. It is Council's statutory obligation to manage the flood risk within the LGA. As such, Council is obliged to act in good faith and update its flood forecasting instruments such as flood study and flood maps as soon as the latest and most up to date information becomes available.
	4. Flood extent of properties significantly increased in the new flood map.	Council acknowledges that some variations have been noted around the flood fringe areas. Variations in the flood extent is mainly due to the better representation of the current landform in the flood analysis. While flood affectation has been extended to some properties, there are significant number of properties that became flood free in the updated flood map. For example, 71 properties that were flood affected previously are now completely flood free compared to only 33 flood free properties now being partially flood affected in 1%AEP.
	5. Residents never experienced flooding of this extent in the past.	1% AEP are very rare events that have only 1% chance to occur in any particular year. The WSC catchment has experienced significant flooding in the recent past. It is essential that Council updates its flood forecasting tools such as flood maps with the best available data and technique to act on good faith as required by Section 733 of the Local Government Act.
	6. Impacts of climate change to be modelled and assessed.	An assessment of climate change impact has been included in Section 6 of the flood study report (Attachment F).
	7. Future development scenario to be included in the mapping. Flood maps will change after development.	The current flood maps are required to reflect flood behaviour and related risks due to the current landform. Flood maps are progressively updated once the landform is altered as a result of future developments. Understanding the current flood risks is an important first step to ensure appropriate control measures are in place to mitigate the flood risk in future development.
	8. Inclusion of peak flow for 1% AEP and PMF from tributaries in the report.	Peak flow rates at key crossings and tributary outlets are included in the flood study report (Attachment F).
	9. Inclusion of water surface contour.	Separate maps showing the water surface contours are included in the flood study report (Attachment F).

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

Key Issues	Details of Issues	Council Officer Response
	10. Report does not consider flood evacuation and flood management strategies.	Flood study identifies the risk associated with flood affectation. Flood risk management study and plan is the next step that considers a range of flood risks and mitigations strategies. In case of Wianamatta South Creek Catchment, precinct planning process that the Stage Government is undertaking will consider mitigation strategies as necessary.
	11. Flood levels and extents should be replaced with the 2004 study results.	Council disagrees with this request for the following reasons: <ul style="list-style-type: none"> Two-dimensional hydraulic modelling is the industry standard for large scale flood studies recognising the limitations of one-dimensional models such as HEC-RAS and MIKE-11 used in the 2004 flood study. The one-dimensional MIKE-11 model predicts flood levels that do not vary across the floodplain and do not accurately mimic the actual hydraulic profile during a flood event. The 2004 flood extents have a significant potential for error due to the accuracy of topographical data used. The 2004 study is now outdated in terms of the input data and modelling techniques employed.

6. Benefits of adopting the updated flood study

Adopting the updated flood study and associated flood maps (Attachment C & D) will provide the following benefits:

- The study uses most current topographical information, representing the best available data for improved flood forecasting.
- The study utilises two-dimensional hydraulic modelling technology that mimics the flood behaviour more accurately compared to the one-dimensional modelling technology used in the 2004 flood study.
- The study includes some additional areas from the Badgerys Creek and Thompsons Creek catchments which were not previously studied or mapped.
- The updated flood study provides currency and will enable Council to align its flood maps with the most current studies and topographical information that are informing the planning of this catchment including the planning of the Aerotropolis.

7. Conclusion

As can be seen from the foregoing discussions, the updated flood study and associated flood maps provide the best available information to assist Council better manage the flood risks arising from occupation of flood prone lands within the Wianamatta South Creek catchment. The variations in the flood extents between the current (2004 maps) and the new flood maps are mostly attributable to higher levels of accuracy in the topographical data that has been

CITY INFRASTRUCTURE AND ENVIRONMENT REPORT

used for the new study. Two-dimensional modelling technique used in the study has also provided better representation of the hydraulic profile of flood behavior.

The updated study will enable Council to align the current flood mapping for the Wianamatta South Creek with the most current information available for this catchment and assist in planning for the Aerotropolis. This report therefore recommends that Council adopts the updated Wianamatta South Creek Flood Study and associated flood maps (Attachment C&D).

CONSIDERATIONS

Economic	Adoption of the updated Wianamatta South Creek Flood Study will not have direct economic and financial impacts on Council.
Environment	The updating of South Creek Flood Study will facilitate better management of the environmental health of waterways. Updating of the South Creek Flood Study will ensure confidence to the better environmental performance of buildings and homes.
Social	Preserve and maintain social welfare and minimise public risk associated with floods.
Civic Leadership	Encourage the community to engage in Council initiatives and actions.
Legislative	NSW Flood Prone Land Policy and NSW Floodplain Development Manual. Section 733 Local Government Act
Risk	This report supports the use of best and most up to date information to mitigate flood risk.

ATTACHMENTS

1. Attachment A - changes to flood impacts arising from updated flood maps under %1 AEP scenario
2. Attachment B - changes to flood impacts arising from new flood maps under PMF scenario
3. Attachment C - updated flood maps under 1% AEP scenario for council adoption
4. Attachment D - updated flood maps under PMF scenario for council adoption
5. Attachment E - technical response related to flood modelling (Under separate cover)
6. Attachment F - Wianamatta (South) Creek Flood Study 2020 Liverpool LGA report (Under separate cover)

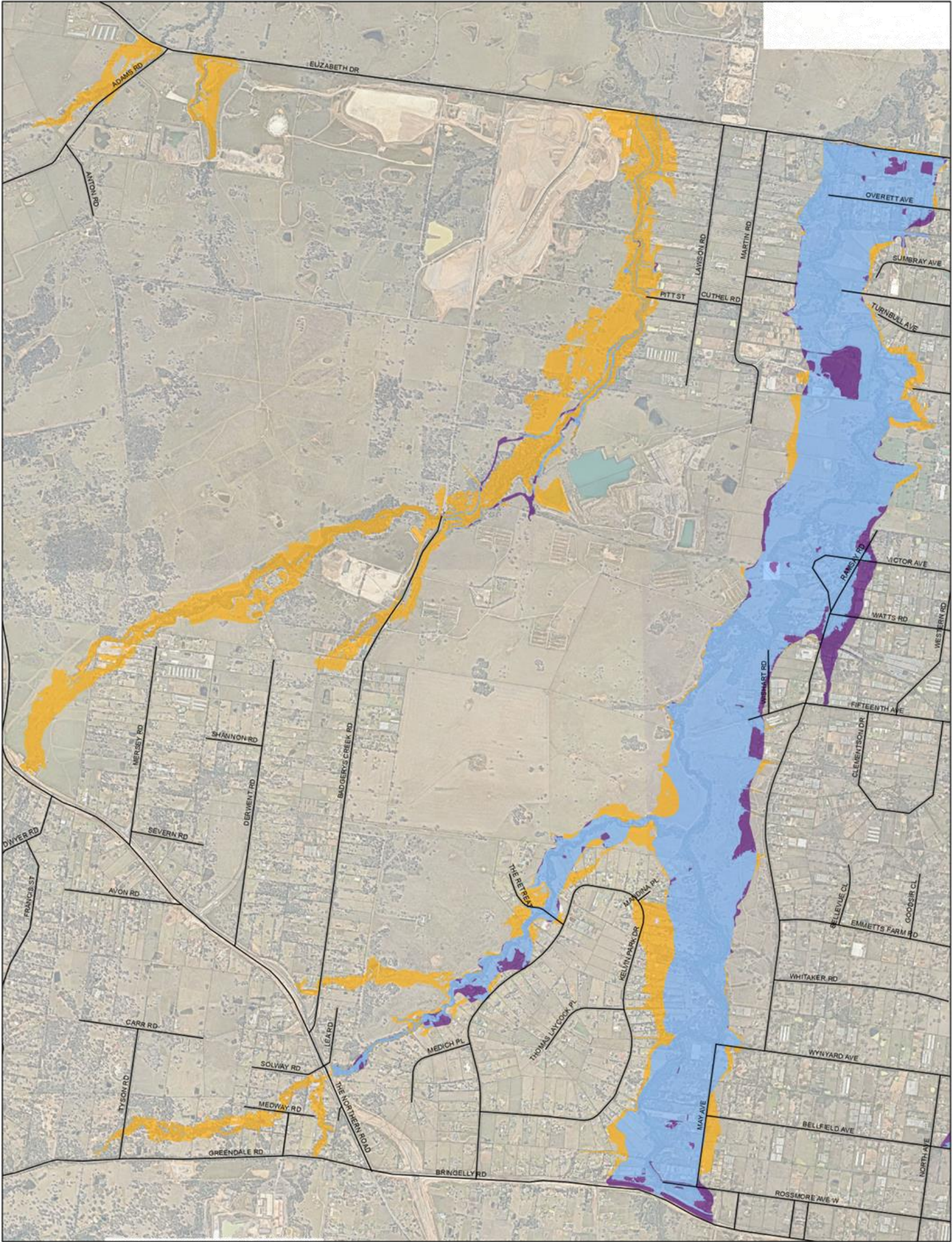


KEMPS CREEK

1% AEP PROPERTY AFFECTATION - COMPARISON TO 2004 PLAN

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Legend
 Referenced flood affectation in the new study
 Flood affectation in both studies
 Increased flood affectation in the new study
 Catchment

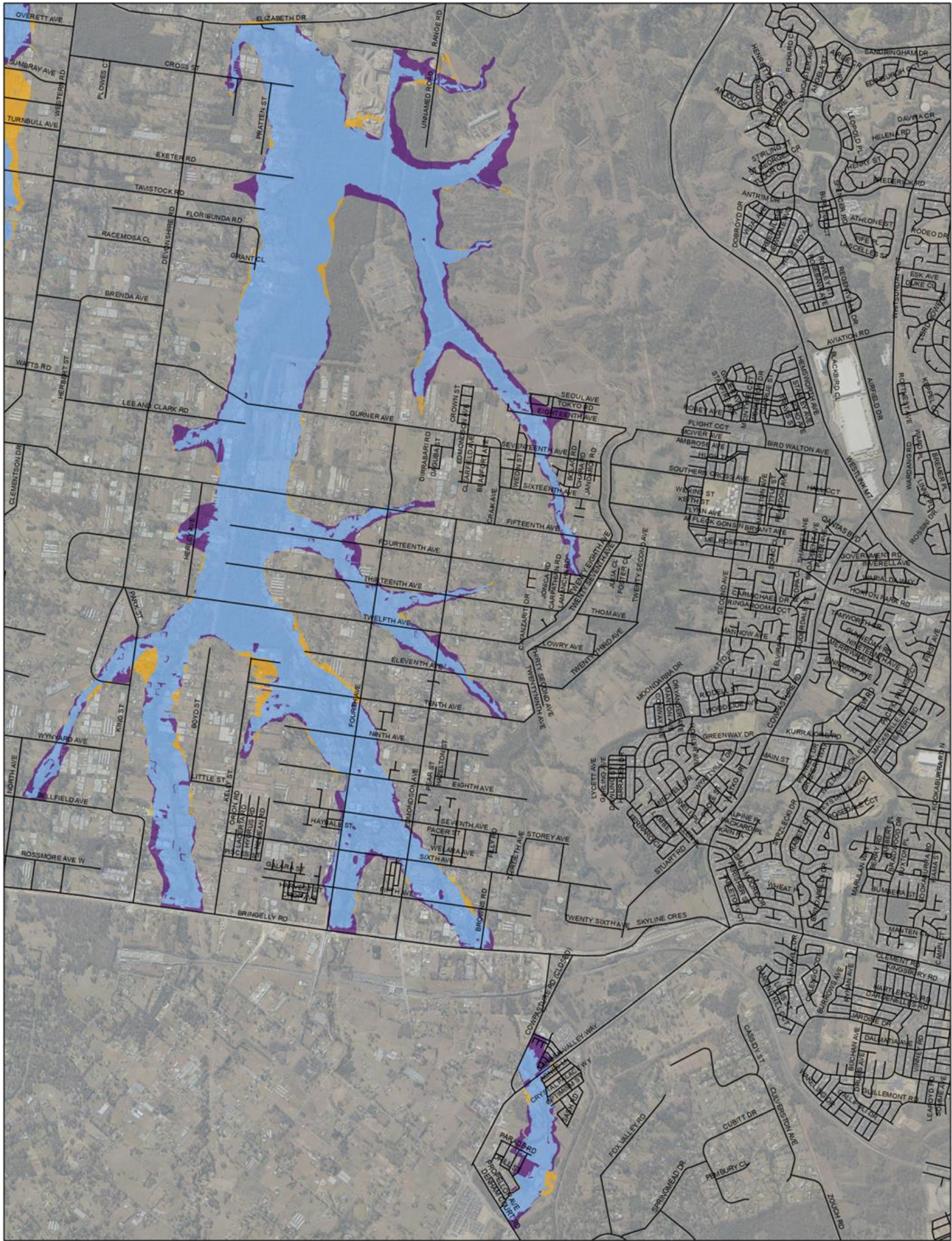
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ATTACHMENT A
WIANAMATTA SOUTH CREEK
1% AEP PROPERTY AFFECTATION - COMPARISON TO 2004 PLAN





Date: 10/03/2021



Legend
Increased flood affectation in the new study
Flood affectation in both studies
Relieved flood affectation in the new study
Cadastral

ATTACHMENT B
KEMPS CREEK
PMF PROPERTY AFFECTATION - COMPARISON TO 2004 PLAN

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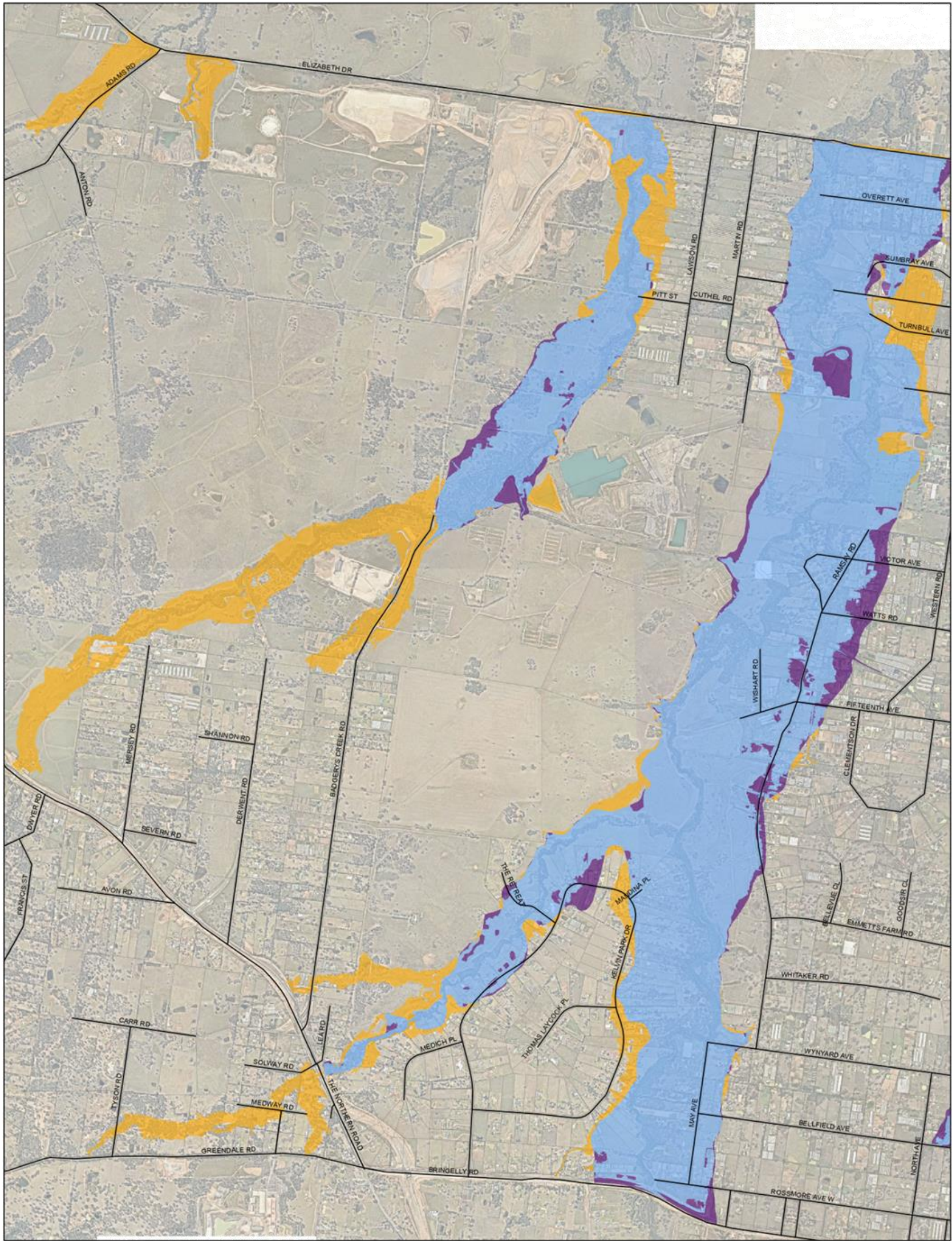
LIVERPOOL
CITY COUNCIL



03450001380

Metres

Date: 11/03/2021



Legend
Increased flood affectation in the new study
Flood affectation in both studies
Reduced flood affectation in the new study
Catchment

ATTACHMENT B
WIANAMATTA SOUTH CREEK
PMF PROPERTY AFFECTATION - COMPARISON TO 2004 PLAN

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LIVERPOOL

CITY COUNCIL

THE GREAT SOUTH WEST

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285

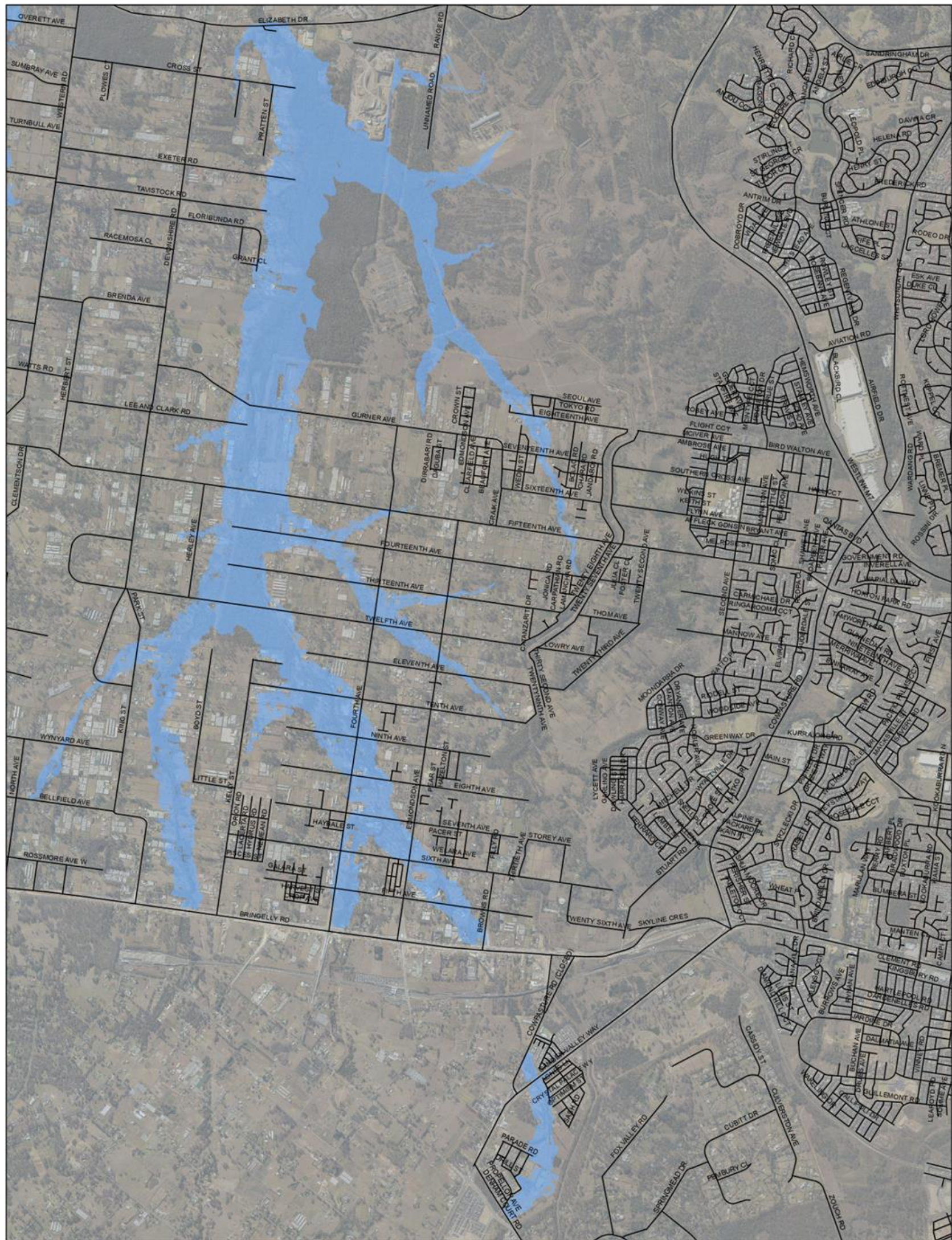
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Metres

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Date: 11/03/2021

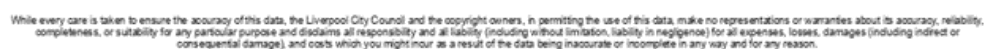


ATTACHMENT C
KEMPS CREEK
1% AEP FLOOD EXTENT

Legend
1% AEP Flood Extent
Cadastral

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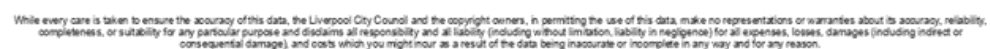
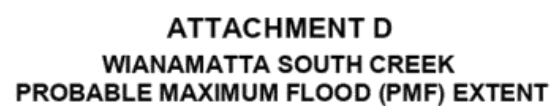






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OPER 03

Managing Drainage Channels and Waterways

Strategic Objective	Liveable, Sustainable, Resilient Manage stormwater and drainage infrastructure to mitigate risk to the environment and the community
File Ref	344758.2023
Report By	Maruf Hossain - Coordinator Floodplain and Water Management
Approved By	Jason Breton - Director Operations

EXECUTIVE SUMMARY

The Council, at its meeting held on 30 August 2023, considered a report regarding the management of Hopkins Creek in West Hoxton/Hinchinbrook and presented potential modification options to improve the condition and performance of the creek. Council at this meeting resolved to defer endorsing the preferred creek modification option and directed the CEO to bring back to Council a previous report presented to Council which included the drainage systems that don't work and the costs to go back to rectify them.

The report discusses stormwater management approaches under the concept of Sponge City and stormwater management initiatives by Council.

The report presented to Council on 29 September 2021 as Attachment 1.
The Report presented to Council on 30 August 2023 as Attachment 2.

RECOMMENDATION

That Council:

1. Receives and notes this report.
2. Endorses Hopkins Creek Modification Option 4 as reported on 30 August 2023 for improvement, existing creek condition, performance, and maintenance requirements.
3. Endorses to proceed with the community consultation on Option 4 with the residents and property owners bordering Hopkins Creek.

REPORT

1. Sponge City

Sponge City is an urban stormwater management model in the form of a sustainable drainage system and a set of nature-based solutions that use natural landscapes to catch, store and clean water prior to discharging into the natural waterways, and for reuse as recycled water. Sponge cities are part of a worldwide movement that goes by various names: green infrastructure in Europe, low-impact development in the United States, nature-based solutions in Canada and water-sensitive urban design (WSUD) in Australia.

2. Water Sensitive Urban Design (WSUD) in Liverpool LGA

The key objectives of our water quality improvement initiatives are to embed the thinking of WSUD principles in to all Council businesses, ensure the compliance of the initiatives within Council, development community and general public, and influence the State and Federal Government to invest on this important area of concern. While Council has been implementing a number of initiatives and programs in the past, Council has introduced new Water Management Policy and Water Quality Management Strategy in 2016, which aim to achieve this outcome progressively in a coordinated way. By doing this, Liverpool Council will become a water sensitive council and WSUD will become a way of our life.

Over the past decade the Council has made significant achievements in stormwater management in accordance with the current best management practices for stormwater management.

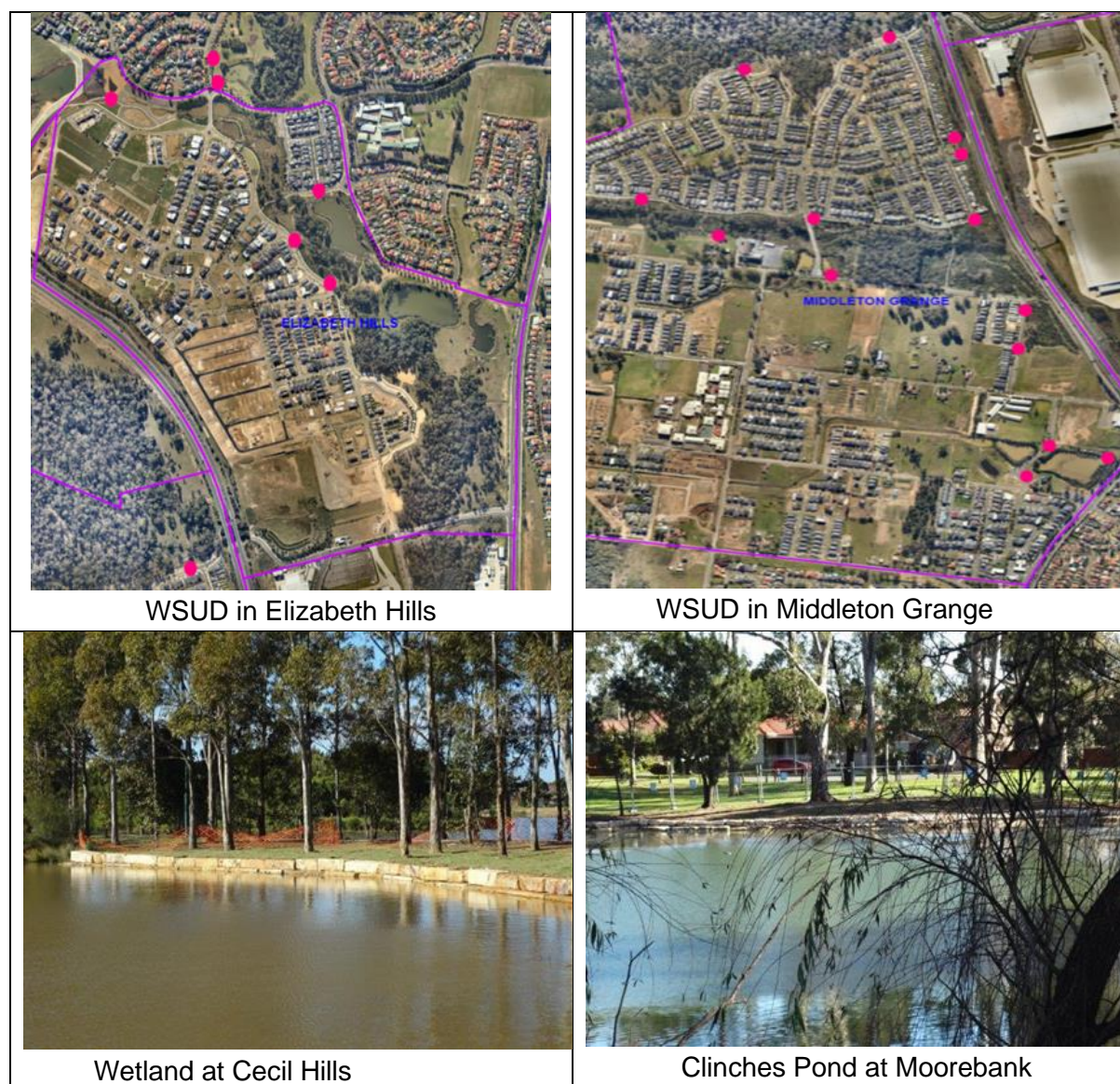
A range of programs are currently in place to manage water quantity and quality in new urban release areas and existing areas. The key actions include:

- WSUD provisions in new development – raingardens and bio retention basins;
- Development of a Technical Guidelines for WSUD;
- Development of water quality model MUSIC Link for Liverpool LGA;
- Revised Water Quality Development Control Plan (DCP);
- Water quality treatment systems installed by Council as part of road, footpath and park upgrade works;
- Environment Restoration Program (ERP) strategy and riparian zone management.

While Council's current DCP has specific water quality targets to improve water quality and ecological health of waterways and wetlands, the Integrated Water Quality Management Strategy together with the revised Development Control Plan and WSUD technical guideline enables a more coordinated and consistent application of current best management practice across the LGA.

In recognition of council's initiatives and success Council has won the prestigious NSW Local Government Excellence in Environment Award in 2018.

As outlined above, Council has developed the WSUD guidelines for stormwater management and being implemented across the LGA including in Middleton Grange, Cecil Hills, Edmondson Park, Austral and Leppington. Examples of such WSUD initiatives include the following.



Water quality improvement from its existing stormwater network has been a real challenge due to the complexity and cost involved in retrofitting the existing system. This challenge has been exacerbated by the anticipated future growth. While Council had number of ad-hoc initiatives to improve water quality of its waterways in the past, a need for more integrated approach has recently been realised. As a result, the Council is implementing a number of initiatives to embed the thinking of WSUD principles into Council business with an aim to improve and maintain water quality performance of our rivers and waterways. Current initiatives include:

A. Hopkins Creek modification works as outlined in the Council Report dated August 2023 – Attachment 2.

B. Affleck Graden Creek modification works – design is being finalized and works will be undertaken in 2023-24 under the capital works program.

FINANCIAL IMPLICATIONS

Costs associated with this recommendation for Hopkins Creek modification works are outside of the Council's current budget and long-term financial plan. It is proposed to undertake the project in two (2) stages, lower reach of the creek in 2024-25 and the upper reach in 2027-28 financial years under the Capital Works Program.

	2023/24	2024/25	2025/26	2026/27	2027/28
Operating budget / LTFP impact					
Capital budget impact		\$2,862,000			\$2,095,000
Ongoing unbudgeted impact to opex from capital expenditure					
Unbudgeted impact to unrestricted cash					
Funding source					

CONSIDERATIONS

Economic	Enhance the environmental performance of stormwater assets.
Environment	Manage the environmental health of waterways. Manage air, water, noise and chemical pollution.
Social	Promote community education and awareness as key element to manage water quality.
Civic Leadership	Act as an environmental leader in the community.
Legislative	Water Management Act 2000.
Risk	There could be potential breaches of the Water Management Act if compliance with the requirements of the Act is not achieved.

ATTACHMENTS

1. Council Report September 2021 - Managing Drainage Channels and Waterways
2. Council Report August 2023 - Managing Drainage Channel and Waterways

INF 01	Managing Drainage Channels and Waterways
Strategic Direction	Strengthening and Protecting our Environment Develop, and advocate for, plans that support safe and friendly communities
File Ref	268322.2021
Report By	Rinas Cook - Manager Infrastructure Planning
Approved By	Raj Autar - Director Infrastructure & Environment

EXECUTIVE SUMMARY

Council, at its meeting held on 28 July 2021, considered a report regarding the planned construction of a 6 megalitre flood detention basin in Austral to mitigate flooding impacts arising from urban developments.

Flood detention basins and associated trunk drainage systems are considered enabling infrastructure as it allows filling and occupation of lands that would otherwise remain flood prone. Upon completion, the Austral and Leppington North Precincts will have 19 flood detention basins with 9km of associated trunk drainage systems comprising 4km piped and 5km open drainage channels.

In view of experienced difficulties with the operation and performance of some of the existing open drainage channels, Council at this meeting resolved that Council identify suitable areas where underflow (piped) drainage would possibly work (as an alternative to open drainage channels) and report back to the September Council meeting.

Council over the past year has already been reviewing its current approach to the selection of appropriate drainage systems in the urban release areas such that a satisfactory balance can be achieved between the necessary performance attributes of drainage systems, its environmental impacts, and community expectations on appearance and form.

This report discusses the current issues surrounding stormwater management in urbanised catchments and:

- a) provides plans for improving the operation and performance of some of the existing open drainage channels; and
- b) using Austral and Leppington North Precinct drainage strategy as a case study, identifies areas within these precincts where hybrid drainage systems comprising piped and open channel could be effective. Preliminary investigations have shown that up to 2km of the 5km planned open drainage channels within this precinct can be

replaced with piped drainage systems. Further analysis will be required to assess the viability of this conversion.

The Austral and Leppington North drainage master plan is included as Attachment 1.

RECOMMENDATION

That Council:

1. Receives and notes this report.
2. Endorses the process and principles presented in this report to guide the planning and design of drainage systems, including improvements to existing ones.

REPORT

1. Background and context

Natural creeks and waterways began to be piped or lined with concrete, brick or stone in the 1800's to assist urban development. This system of drainage achieved significant efficiencies in conveying stormwater, reducing flood risks and unlocking land for construction. Throughout the 20th century, hard engineering of natural streams continued at a rapid rate, facilitating much of Sydney's ongoing urban expansion.

Low-flow pipes have also been extensively used within drainage corridors to create additional open space. These are piped drainage systems within drainage channels and waterways that allow stormwater from normal rain events to be discharged via pipes leaving the channel above it dry for most of the time and available for recreational purposes.



Figure 1 - photos of piped and concrete lined drainage systems along Brickmakers Creek, Liverpool.

While enormously efficient at flood conveyance, the hard engineering of the waterways created some unintended consequences, such as:

- concrete surface of pipes and channels were not conducive to creating much needed habitats to support aquatic life. Consequently, piping of waterways created significant discontinuity in creek ecosystems impacting important aquatic flora and fauna, e.g. compromised fish passage along creeks and waterways.

- due to its smooth surface, these stormwater systems rapidly flushed toxic oils, pesticides, nutrients and other pollutants from developed areas into downstream waterways impacting aquatic life; and
- similarly, the relatively smooth surface facilitated high velocity flows causing damaging downstream peak flows resulting in flooding and erosion issues.

However, over the last 20 years, community and stakeholder attitudes towards urban waterways have changed significantly. There is now a greater appreciation of the social and environmental values waterways can provide to the local community and as a result the last 20 years have seen large scale naturalisation of engineered drainage systems, both locally and overseas.

2. Government intervention and response

Due to its long-term detrimental impact on water quality, ecology and flooding as discussed above, State Government Agencies over time have precluded the use of low-flow and hard-engineered drainage systems within waterways. Consequently, over the last twenty years, State Agencies have been stipulating the naturalisation of drainage channels to achieve the following objectives and benefits:

- water quality improvement through progressive removal of litter and nutrients e.g. rain gardens and drainage/bio swales;
- ecological restoration e.g. creating fish friendly waterways by creating riffles (shallow areas) and pools;
- flood mitigation through better management of water velocity and timing resulting in reduced flood severity;
- potential urban cooling and associated environmental improvements through selective planting;
- creating high quality and accessible public open space; and
- improving the visual amenity as the appearance of the creek becomes more natural.



Figure 2 - photos showing restoration of Bonds Creek by Campbelltown City Council. (upstream of Denham Court Road)

3. Issues with naturalised drainage channels

Whilst drainage channels have proven to be effective stormwater management solutions to mitigate the effects of impervious development and urbanisation, the design of some of

these waterways in heavily pedestrianised and built-up urban areas haven't been cognisant of public safety issues and community expectations regarding the ongoing appearance of the waterways.

The following lists some of the issues with existing waterways and open drainage systems, that must be key considerations in any future design of drainage systems:

- Public health and safety - invasive weed growth within the channel traps litter and creates a thriving environment for vermin and snakes thereby creating a threat to public safety.
- Bank slopes - steep channel bank slopes along some of the channels, as shown in the photos below, render regular maintenance extremely difficult, thereby necessitating use of specialised machinery making maintenance a costly activity.
- Accessibility and missed opportunities - the combination of steep bank slopes and risk issues identified above means that the drainage corridor is not available for public recreation and enjoyment.



Figure 3 - photos of Hopkins Creek, Hinchinbrook and Affleck Gardens, Middleton Grange illustrating the issues highlighted above.

4. Selecting the best drainage system - design considerations

In view of past community and stakeholder concerns regarding the condition and operation of some of Council's open drainage channels, Council commenced a review of drainage system designs to develop best-practice guidelines aimed at achieving a satisfactory balance between the many, and sometimes competing, objectives and functions of waterways. The following sections identify the legislative and policy framework that must be key considerations in the design and construction of waterways and drainage channels.

4.1. Legislative framework and constraints of instream activities

All works within waterways are regulated by the provisions of the *Water Management Act 2000* (WM Act). The NSW Office of Water administers the WM Act and has produced guidelines to ensure the design and construction of works within a watercourse must protect and enhance water flow, water quality, stream ecology and existing riparian vegetation. Guidelines require that works within the watercourse must:

- maintain or mimic natural hydraulic, hydrologic and ecological functions of the watercourse;

- accommodate natural watercourse functions by establishing natural bed and bank profiles, creating meanders and chain of ponds; and
- ensure that any modifications to watercourses do not increase flow velocities by constricting flows e.g. piping.

4.2. Council's Water Management Policy - towards best practice water management

To achieve better water management outcomes, Council in 2016 adopted a Water Management Policy, which sets out standards for the management of all aspects of the water cycle in a holistic and coordinated way. Pertinently, the Policy requires all new developments in urban release areas of the LGA to incorporate best practice water management techniques by adopting Water Sensitive Urban Design (WSUD) principles in the planning, design, construction and maintenance of water related infrastructure, and seeing stormwater as a resource and not waste.

WSUD has significantly shifted focus of drainage systems from the conventional system of directly connecting pits and pipes to downstream waterways to a system that is more attuned to the natural hydrological and ecological processes. This is achieved by on-site collection, treatment and utilisation of water flows as part of an integrated treatment train to progressively remove litter and nutrients e.g. rain gardens, drainage swales and wetlands.

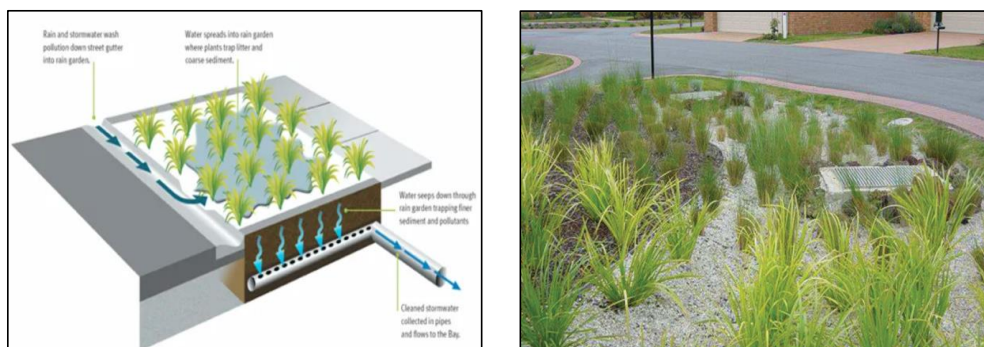


Figure 4 - illustration and photo of typical rain garden.

5. Towards a balanced, hybrid approach

5.1. Need for change

As stated above, water sensitive infrastructure generally requires large footprints to effectively respond to the multiple objectives of these systems. Further, design of waterways in heavily pedestrianised and built-up urban areas must be cognisant of public safety issues and community expectations regarding the ongoing appearance of the waterways.

The size of waterways required to accommodate all the above requirements means that costs associated with land acquisition, construction and maintenance can be significant and ongoing. Consequently, there will be situations where not all requirements of WSUD or the WM Act will be able to be accommodated in the design of waterways e.g. meandering channels, gradual bank slopes, and pools and riffles, due to its large footprint may not be able to be provided along all the affected waterways.

In these situations where space is constrained or public safety and amenity are likely to be impacted, combination of piped drainage with open overflow channels are considered the best practicable option to achieve effective treatment. It is considered that there is opportunity to better incorporate the best of both, piped and open drainage, to overcome the poor operation and performance issues outlined in 3 above. The benefits of using this hybrid system includes reduced maintenance costs, aesthetically pleasing result, reduced land requirement and improved public safety as shown in the photos below.

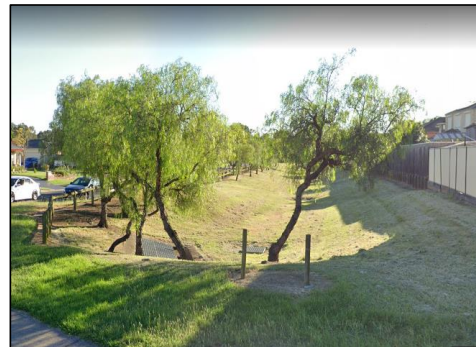


Figure 5 - photos of open space over low flow pipes in Horningsea Park

5.2. A case study - Austral and Leppington North drainage strategy

The early stage of delivery of stormwater infrastructure within the Austral and Leppington North Precinct has provided this opportunity to explore options for such hybrid drainage systems. Investigations so far have found that up to 2km of the open drainage channels within the Precinct could potentially be redesigned as a hybrid system comprising low-flow pipes with overflow open channels.

As stated previously, upon completion, the Austral and Leppington North Precincts will have 19 flood detention basins with 9km of associated trunk drainage systems comprising 4km piped and 5km open drainage channels. Flood detention basins generally comprise the following major elements:

- i). inlet system of pipes and open drainage channels that collect stormwater from upstream urbanised catchments and discharge into the basin;
- ii). a basin that collects and temporarily stores water until downstream receiving creeks have the capacity to receive the stored stormwater. By retaining and gradually releasing stormwater, basins can slow the velocity of stormwater and reduce damaging peak flows; and
- iii). outlet system of pipes and open drainage channels that drain the stormwater from the basin to the nearest creeks.

Based on the current strategy, most of the inlet systems are proposed as open drainage channels. These drainage channels will be located near residential dwellings or other active use sites such as playgrounds with parts of the channel falling generally outside defined waterways. It is considered there could be a range of community benefits in converting some of these channels into a low flow drainage system. Preliminary investigations show that up to 2km of the 5km planned open drainage channels can be replaced with piped drainage systems.

The following extract from the Austral and Leppington North drainage strategy shows sections of open channels considered viable for conversion to a low flow pipe system.

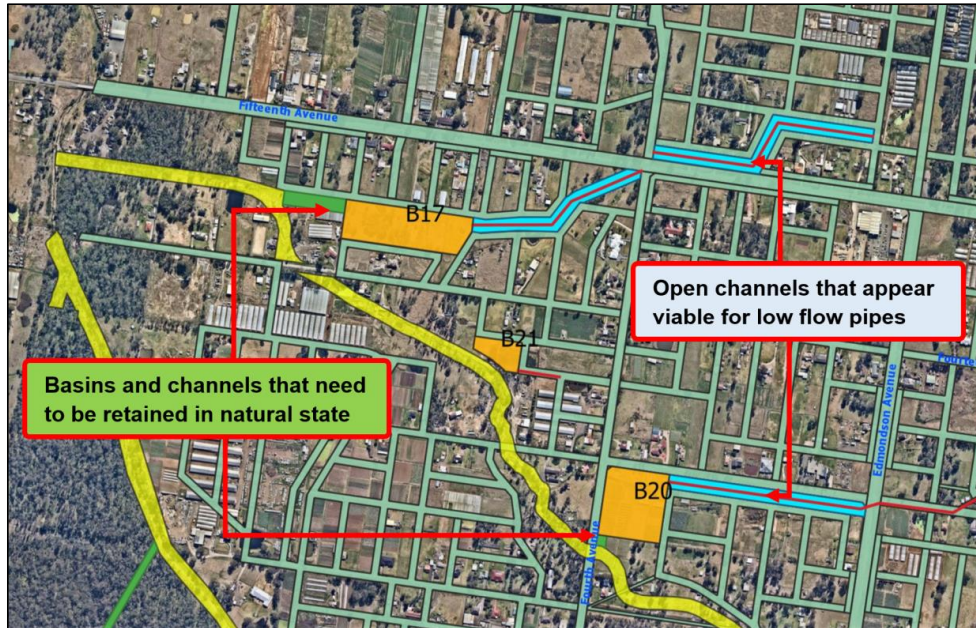


Figure 6 - areas where low flow pipes could possibly work.

The conversion of the identified channels to hybrid systems will provide additional usable space for public recreation and enjoyment while still providing the required corridor for the conveyance of flood waters. While preliminary investigations show that these conversions would be viable, further investigations will be necessary to:

- ensure there are no adverse upstream flooding impacts;
- ensure that any works within defined waterways comply with the WM Act; and
- determine any cost implications on the Contributions Plan.

5.3. Need for naturalised waterways

It is proposed that the flood detention basins (that do not provide active secondary uses such as sporting fields) and the outlet drainage channels be retained in its natural state as required by the WM Act. As can be seen from the attached drainage master plan, the outlet systems lie predominantly within existing or proposed open spaces and riparian corridors, where engineered piped drainage systems would be precluded under the WM Act.

Where drainage channels are constructed as naturalised waterways, appropriate design techniques will be used to ensure ongoing maintenance and financial liabilities are minimised, while effectively meeting the necessary drainage and environmental outcomes. Through the selection of appropriate vegetation and provision of satisfactory maintenance access, it is anticipated that these drainage systems will reduce the current maintenance burden.



Figure 7 - photo of existing outlet to Basin 6 and example of its proposed restoration (Campbelltown City).

5.4. Addressing issues with the existing open channels

With regards to issues identified with some of the existing open drainage channels, the following two sites have been selected for design investigations with the view to addressing the range of operational and performances issues affecting these channels.

a) Hopkins Creek, West Hoxton and Hinchinbrook

Council is in the process of appointing a consultant for undertaking necessary designs to address the current deficiencies. Following completion of preliminary designs, community consultations will be organised to seek their views on available solutions.

b) Affleck Gardens, Middleton Grange

With regards to the existing open drainage channel along Affleck Gardens, Council is currently developing designs for the redevelopment of the open space bound by Affleck Gardens North and South to provide a playground, outdoor gyms and associated landscaping. This has provided the opportunity to incorporate the drainage channel into the adjoining open space for a more integrated space for public recreation and enjoyment. Following completion of preliminary designs, community consultations will be organised to seek public views on this proposal.



Figure 8 - aerial view of Affleck Gardens and associated open space.

6. Conclusion

The management of stormwater has undergone significant evolution over the last few decades as community and stakeholder attitudes towards urban waterways have changed significantly. The most significant shift has been in the way stormwater is now seen: from waste requiring disposal to a resource needing preservation and reuse. While the introduction of water sensitive design principles have shifted focus of drainage systems from the conventional system of directly connecting pits and pipes to downstream waterways to a system that is more attuned to the natural hydrological and ecological processes, this report has shown that a satisfactory balance must be achieved between the necessary performance attributes of drainage systems, its environmental impacts, and community expectations on appearance and form.

CONSIDERATIONS

Economic	Enhance the environmental performance of stormwater assets.
Environment	Manage the environmental health of waterways. Manage air, water, noise and chemical pollution. There are no environmental and sustainability considerations.
Social	Promote community education and awareness as key element to manage water quality.
Civic Leadership	Act as an environmental leader in the community.
Legislative	Water Management Act 2000
Risk	There could be potential breaches of the Water Management Act if compliance with the requirements of the Act is not achieved.

ATTACHMENTS

1. Austral and Leppington North Drainage Strategy - showing areas where low flow pipes could be viable

Council

COUNCIL DECISION

Motion:

Moved: Cllr Harle

Seconded: Cllr Hadchiti

That Council:

1. Receives and notes this report.
2. Endorses the process and principles presented in this report to guide the planning and design of drainage systems, including improvements to existing ones.
3. Conducts extensive community consultation with residents and property owners bordering any proposed stormwater and flood mitigation works and;
 - a. sufficient resources be provided to conduct a comprehensive consultation exercise; and
 - b. proposed plans of those works be brought back to Council for approval.
4. Write to the appropriate Minister for the Environment asking that the current stormwater policy be reviewed based on community feedback and any unintended detrimental effects of those policies.

On being put to the meeting the motion was declared CARRIED.

Councillors voted unanimously for this item.

Note: Cllr Ayyad had not joined the meeting when this item was voted on.

OPER 02	Managing Drainage Channels and Waterways
Strategic Objective	Liveable, Sustainable, Resilient Manage stormwater and drainage infrastructure to mitigate risk to the environment and the community
File Ref	264323.2023
Report By	Maruf Hossain - Coordinator Floodplain and Water Management
Approved By	Jason Breton - Director Operations

EXECUTIVE SUMMARY

The Council, at its meeting held on 29 September 2021, considered a report regarding the management of drainage channels and waterways in existing and new release areas across the LGA. In view of experienced difficulties with the operation and performance of some of the existing open drainage channels, Council at this meeting resolved to endorse the process and principles presented in the report to guide the planning and design of drainage systems, including improvements to existing ones. Council also endorsed that the proposed plans of those works be brought back to Council for approval and undertake extensive community consultation with the affected property owners.

This report discusses the current issues with the management of Hopkins Creek in West Hoxton/Hinchinbrook and presents potential modification options to improve the condition and performance of the creek. Four (4) modification options of Hopkins Creek were presented at the Councillor Briefing on 18 July 2023.

The presentation of the Hopkins Creek modification option is included as Attachment 1.

RECOMMENDATION

That Council:

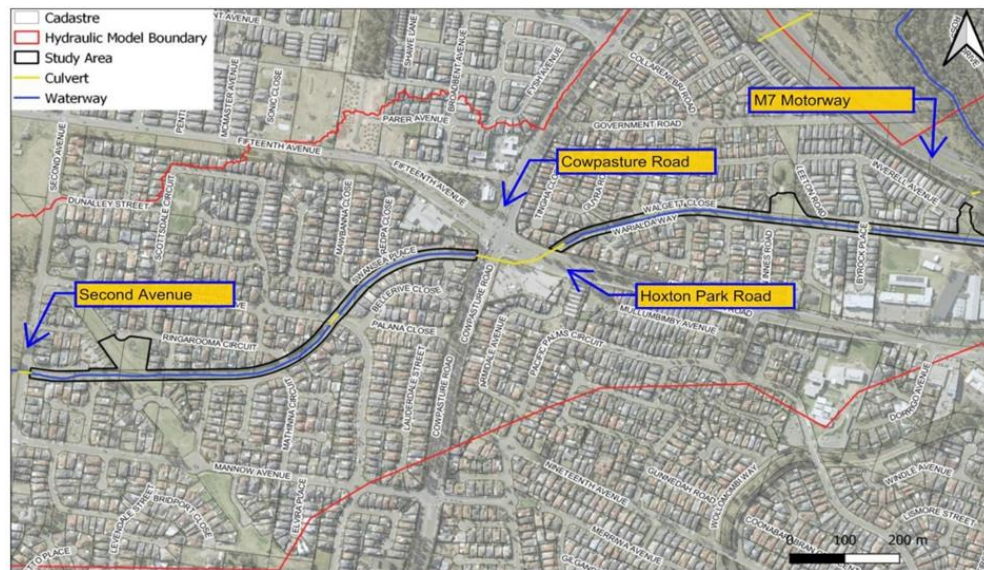
1. Receives and notes this report.
2. Endorses Hopkins Creek Modification Option 4 for improvement, existing creek condition, performance, and maintenance requirements.
3. Endorses to proceed with the community consultation on Option 4 with the residents and property owners bordering Hopkins Creek.

REPORT**1. Background and context**

Hopkins Creek was constructed in 1990s to mitigate adverse impacts of flooding and facilitate residential housing development in West Hoxton and Hinchinbrook areas. The creek is located within a narrow corridor between fences with steep batter slopes. In recent years the creek has been subject to ongoing bank erosion, bed erosion, ponding of water, habitat for snakes and rats, and ground for mosquito breeding, resulted in high maintenance demand.

To address the issues an experienced consultant was engaged to develop potential creek modification options addressing the issues as outlined above. The consultant has developed potential creek modification options for the upper and lower reaches of the creek as shown in Figure1 below.

Figure1: Hopkins Creek location map.

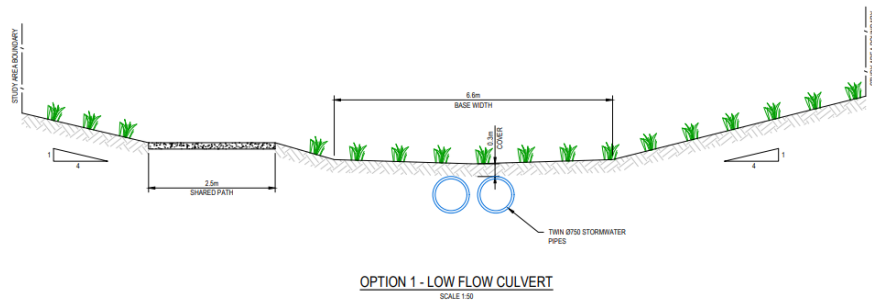
**2. Hopkins Creek modification options.**

To address the current issues with the management of Hopkins Creek four (4) potential modification options have been developed to improve the condition and performance of the creek and these options were presented at the Councillor Briefing on 18 July 2023. The proposed modification options are outlined below.

Option 1: Low flow pipes with grass lined channel above

Proposed creek modification works under Option1 involves construction of twin 750mm diameter pipes under the existing creek bed with grass lined channel above. This option also includes a 2.5metre footpath along the creek corridor with pedestrian bridges and stepping stone crossings. During frequent flood events stormwater runoff will be conveyed via the low flow pipes and during major storm events the open channel will be activated for flood conveyance. Indicative section of the creek modification works under option 1 is shown below – Figure 2.

Figure 2:



Project Cost: Option1

Estimated construction and ongoing annual maintenance cost for Option1 is shown in Table1 below.

Table1:

Option 1 – Low Flow Pipes	Upper Reach	Lower Reach	Total
Capital Cost	\$5,458,000	\$4,500,000	\$9,958,000
Annual Maintenance Cost	\$111,000	\$108,000	\$219,000

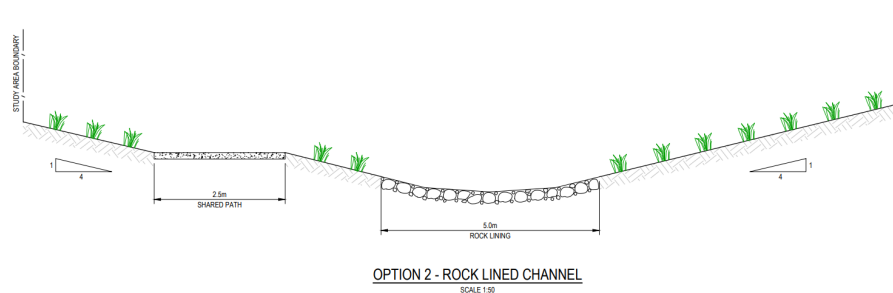
Option 2: Rock lined low flow channel with native grass batters.

Proposed creek modification works under Option 2 involves rock lined low flow channel with native grass batters. This option also includes a 2.5metre concrete pathway along the creek corridor. Indicative section of the creek modification works under option 2 is shown in Figure3.

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Figure3



Project Cost: Option2

Estimated construction and ongoing annual maintenance cost for Option2 is shown in Table2 below.

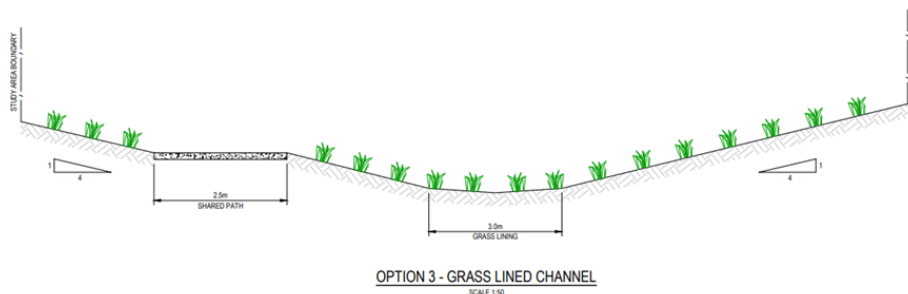
Table2:

Option 2 – Rock Lined Channel	Upper Reach	Lower Reach	Total
Capital Cost	\$4,930,000	\$4,616,000	\$9,456,000
Annual Maintenance Cost	\$159,000	\$159,000	\$318,000

Option3: Grass-lined channel with rock chutes

Proposed creek modification works under Option 3 involves grassed low flow channel with intermediate rock chutes. This option also includes a 2.5metre concrete pathway along the creek corridor. Indicative section of the creek modification works under option3 is shown in Figure4.

Figure4:



Project Cost: Option3

Estimated construction and ongoing annual maintenance cost for Option3 is shown in Table3 below.

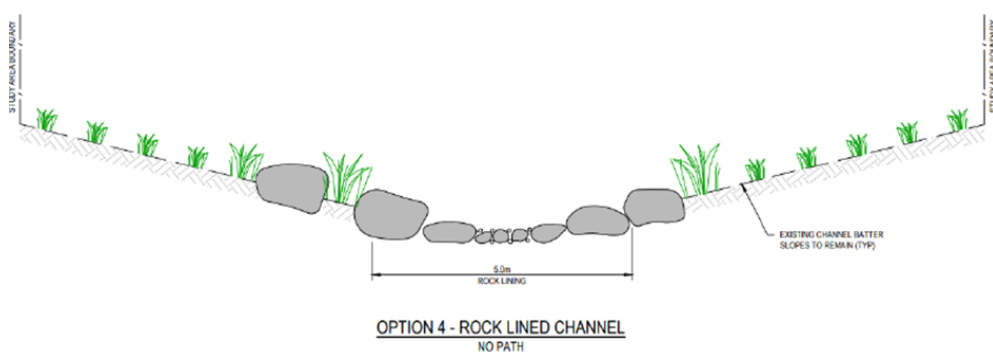
Table3:

Option 3 – Grass Lined Channel	Upper Reach	Lower Reach	Total
Capital Cost	\$3,563,000	\$3,396,000	\$6,959,000
Annual Maintenance Cost	\$102,000	\$102,000	\$204,000

Option4: Naturalised Rock lined channel

Works proposed under Option4 include construction of defined low flow channel with natural sandstone along the creek bed. However, under this option no concrete pathway along the creek corridor is proposed. Indicative section of the creek modification works under option4 is shown in Figure5.

Figure5:



Project Cost: Option4

Estimated construction and ongoing annual maintenance cost for Option4 is shown in Table4 below.

Table4:

Option 4 – Rock Lined Channel Naturalisation)	Upper Reach	Lower Reach	Total
Capital Cost	\$2,095,000	\$2,862,000	\$4,957,000
Annual Maintenance Cost	\$84,000	\$84,000	\$168,000

Common in all options – Extension of Hoxton Park Road Culvert

The section of channel downstream of Hoxton Park Road culvert outlet is the most constrained portion of the study area due to the space required for the outfall, rip rap structure, and the 4 – 4.5 metre elevation difference between the channel invert and the surrounding residential properties resulting in significantly steeper side slopes. This in turn has resulted in erosion and general instability issues in the channel and poses the most complex location for a shared pathway to fit within the corridor. The potential alteration for this section has been extended downstream to the end of Warialda Way covering the extent of channel with steep banks and current erosion within the base of the channel. The proposed layout of this section is shown in Figure 6.



Figure 6 – Extent of culvert extension

The proposed works will include:

- Re-alignment of the outlet protection on the south side to allow enough room for the 2.5m pathway along the top of the outlet structure on the south side;
- Removal of the current rip-rap bank protection at the outlet and replacement with sandstone block walls on both the north and south side of the outlet. and,
- Re-grading of the base of the channel to allow for low flow channel to remove stagnant water and if possible to provide easier maintenance access into the base of the channel up to the culvert outlet.

3. Opportunities and Constraints

The main objective of potential modification options is to address the key issues with operations and performance as outlined above. However, beyond the main objective, one of the key opportunities of the project is to use the Hopkins Creek corridor as a new, regional east-west pedestrian connection. In this regard the provision of a 2.5metre pedestrian pathway along the creek corridor has been included in all the options excluding for Option4.

Option 1: Low flow pipes with grass lined channel above

Low flow piped drainage systems within drainage channels and waterways allow stormwater from normal rain events to be discharged via pipes leaving the channel above it dry for most of the time and available for recreational purposes. While the low-flow pipe system enormously efficient at flood conveyance, the hard engineering of the waterways created some unintended consequences, such as:

- concrete surface of pipes and channels are not conducive to creating much needed habitats to support aquatic life. Consequently, piping of waterways creates significant discontinuity in creek ecosystems impacting important aquatic flora and fauna, e.g. compromised fish passage along creeks and waterways.
- due to its smooth surface, these stormwater systems rapidly flushed toxic oils, pesticides, nutrients and other pollutants from developed areas into downstream waterways impacting aquatic life; and
- similarly, the relatively smooth surface facilitated high velocity flows causing damaging downstream peak flows resulting in flooding and erosion issues.

Over the last 20 years, community and stakeholder attitudes towards urban waterways have changed significantly. There is now a greater appreciation of the social and environmental values waterways can provide to the local community and as a result the last 20 years have seen large scale naturalisation of engineered drainage systems, both locally and overseas.

Due to its long-term detrimental impact on water quality, ecology and flooding as discussed above, State Government Agencies over time have precluded the use of low-flow and hard-engineered drainage systems within waterways.

Legislative framework and constraints of instream activities

All works within waterways are regulated by the provisions of the Water Management Act 2000 (WM Act). The NSW Office of Water administers the WM Act and has produced guidelines to ensure the design and construction of works within a watercourse must protect and enhance water flow, water quality, stream ecology and existing riparian vegetation. Guidelines require that works within the watercourse must:

- maintain or mimic natural hydraulic, hydrologic and ecological functions of the watercourse.
- accommodate natural watercourse functions by establishing natural bed and bank profiles, creating meanders and chain of ponds; and
- ensure that any modifications to watercourses do not increase flow velocities by constricting flows e.g. piping.

Capital cost of the low flow piped system is the highest among the four options presented, which is in the order of \$10M. Ongoing maintenance cost is the second highest, which is \$219,000 per annum.

Option2: Rock lined low flow channel with native grass batters.

The proposed rock-lined channel option will provide scour protection at the base of the channel, without needing to significantly alter the gradient of the existing channel. The proposed modification option offers the opportunity to improve the current waterway vegetation profile.

Capital cost of the proposed rock lined channel is the second highest among the four options presented, which is in the order of \$9.5M. Ongoing maintenance cost is the highest, which is \$318,000 per annum.

Option3: Grass-lined channel with rock chutes.

The proposed grassed channel, accompanied with intermittent rock chutes in both the upper and the lower reaches of the creek. To achieve stable channel gradient, rock chutes are required at intermediate intervals to ensure sufficient fall along the study area with appropriate erosion protection.

The difference of Option 3 from Option 2 will be in longitudinal slope with flatter slopes and rock chutes. The chutes are proposed to be located at existing steeper sections of channel to reduce the amount of cut and fill required along the length of the channel.

Capital cost of the proposed grass lined channel is the third highest among the four options presented, which is in the order of \$7.0M. Ongoing maintenance cost is the third highest, which is \$204,000 per annum.

Option4: Naturalised Rock lined channel.

The proposed naturalised rock lined channel involves significant improvement and treatment to the existing creek bed by placing large sandstones along the edge of the creek bed and on the creek bed. No significant alteration is proposed on the creek bank and pathway is not proposed under this option. The proposed option will significantly improve water quality and aesthetics of the creek. The proposed modification option fully comply with the legislative requirements, satisfies the principles and guidelines of water sensitive urban design (WSUD).

The proposed naturalised channel is the most cost effective and the cheapest option among all the four options presented. Capital cost of the option is in the order of \$5M, which is 50% of the capital cost of low flow pipe system under option1. Ongoing maintenance cost is also the lowest, which is \$168,000 per annum. An example of a similar naturalised channel is shown in Figure 7 below.



Figure 7: Naturalised rock lined channel

4. Conclusion

As can be seen from the proposed Hopkins Creek modification options, low flow piped system under Option1 has the highest capital cost with high annual maintenance cost. Implementing Option1 will significantly change the natural characteristics and ecological values of Hopkins Creek and this option does not satisfy the legislative requirements of the Water Management Act 2000.

Naturalised channel modification under Option4 is the most cost-effective solution with lowest capital and annual maintenance cost among all the four options presented. The proposed option will significantly improve water quality and aesthetics of the creek. The proposed modification option fully complies with the legislative requirements, satisfies the principles and guidelines of water sensitive urban design (WSUD). Adopting this option will provide satisfactory balance between the necessary performance attributes of drainage systems, its environmental impacts, and community expectations on appearance and form.

FINANCIAL IMPLICATIONS

Costs associated with this recommendation are outside of the Council's current budget and long-term financial plan. It is proposed to undertake the project in two (2) stages, lower reach

of the creek in 2024-25 and the upper reach in 2027-28 financial years under the Capital Works Program.

	2023/24	2024/25	2025/26	2026/27	2027/28
Operating budget / LTFP impact					
Capital budget impact		\$2,862,000			\$2,095,000
Ongoing unbudgeted impact to opex from capital expenditure					
Unbudgeted impact to unrestricted cash					
Funding source					

CONSIDERATIONS

Economic	Enhance the environmental performance of stormwater assets.
Environment	Manage the environmental health of waterways. Manage air, water, noise and chemical pollution.
Social	Promote community education and awareness as key element to manage water quality.
Civic Leadership	Act as an environmental leader in the community.
Legislative	Water Management Act 2000.
Risk	There could be potential breaches of the Water Management Act if compliance with the requirements of the Act is not achieved.

ATTACHMENTS

1. Councillor Briefing 18 July 2023 - Hopkins Creek Modification Options

**LIVERPOOL
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11

**ORDINARY MEETING
30 AUGUST 2023
OPERATIONS REPORT**

Council

COUNCIL DECISION

Motion:

Moved: Cllr Harle

Seconded: Cllr Rhodes

That Council:

1. Defer this item for more technical discussions with staff.
2. Direct the CEO to bring back to Council a previous report which included the drainage systems that don't work and the costs to go back to rectify them.

On being put to the meeting the motion was declared CARRIED.

CTTE 01	Minutes of the Liverpool Local Traffic meeting held on 20 September 2023
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Strategic Objective	Liveable, Sustainable, Resilient Promote and advocate for an integrated transport network with improved transport options and connectivity
File Ref	331913.2023
Report By	Charles Wiafe - Manager Transport Management
Approved By	Lina Kakish - Director Planning & Compliance

EXECUTIVE SUMMARY

This report presents the recommendations from the Liverpool Local Traffic Committee meeting held on 20 September 2023. At the meeting, the Committee considered eleven (11) agenda items, and fifteen (15) general business items.

The agenda items include imposition of a 5-tonne load limit on the section of Nuwara Road south of Newbridge Road, as resolved by Council at its on 30 August 2023 Ordinary Meeting.

The imposition of the load limit requires the Traffic Committee's support. Hence the item was presented to Traffic Committee and the Committee has supported the imposition of the load limit. The required community consultation will be carried out in October 2023 for the required transport management plan, that needs to be submitted to TfNSW for endorsement in November 2023. Subject to the approval process, the load limit could be imposed early next year.

A copy of the meeting minutes along with an Attachment Booklet are included in **Attachments 1 and 2**.

RECOMMENDATION

That Council adopts the following Committee recommendations:

Item 1 - Sarah Hollands Drive, Carnes Hill – Proposed Central Median Island

Approves installation of a central median island, two blister islands and associated signs and line markings in Sarah Holland Drive, between Kurrajong Road and Stonequarry Way, as shown in the Attachment Booklet.

Item 2 – Elizabeth Hills – Proposed Local Area Traffic Management (LATM)

- Notes the proposed treatments outlined in the Elizabeth Hills LATM study report as indicated in the Attachment Booklet.
- Undertakes community consultation and its outcome with detailed designs to be presented in future meeting prior to staged installation.

Item 3 – First Avenue and Nineteenth Avenue Intersection, Hoxton Park - Proposed Road Extension

- Approves implementation of a 5-tonne load limit in Lismore Street, subject to the submission of a Transport Management Plan to TfNSW for its endorsement, prior to implementation.
- Undertakes further community consultation with First Avenue residents prior to reopening of the closed First Avenue and Nineteenth Avenue intersection as shown in the Attachment Booklet.

Item 4 – Nuwarra Road, Moorebank – Proposed 5-Tonne Load Limit

- Approves implementation of a 5-tonne load limit along Nuwarra Road, south of Newbridge Road, subject to the submission of a Transport Management Plan for its endorsement, prior to implementation.
- Undertakes community consultation including placement of Variable Message Boards along at the northern and southern approaches of the road section, prior to implementation.

Item 5 – Liverpool Public School Development – Proposed Traffic Facilities

- Notes the installation of a Children crossing across Lachlan Street and a pedestrian refuge at Lachlan Street/Drummond Street and associated signs and line marking scheme to be approved under delegated authority.
- Undertakes community consultation prior to installations of the traffic facilities.

Item 6 - Yarrunga Street and Kookaburra Road (N), Prestons – Half Road Reconstruction Signs and Linemarking Scheme

Approves installation of two median islands and associated signs and line markings as part of the half road reconstruction as shown in the Attachment Booklet.

Item 7 – Pacific Palms Circuit, Hoxton Park – Request for Raised Threshold

Notes that installation of a raised threshold across the section of Pacific Palms Circuit between White Cliffs Avenue and Tilpa Place, is not warranted at this stage.

Item 8 – Edmondson Avenue Upgrade, Austral - Proposed Signs and Line Marking Scheme

- Notes the Edmondson Avenue Upgrade Stage 1 design and associated signs and line marking, as shown in the Attachment Booklet.
- Notes that the detailed design including a signalised intersection at Edmondson Avenue/Fifth Avenue intersection be submitted to TfNSW for its approval.
- Undertakes community consultation with local residents, businesses and schools, prior to the road upgrade.

Item 9 – Fourth Avenue and Gurner Avenue, Austral – Proposed Traffic Facilities

- Notes installation of an interim roundabout and a Children's crossing at a location east of the College driveway, with required kerb and guttering, to be approved under delegated authority.
- Investigates future upgrade of the interim roundabout to future traffic signals.

Item 10 – Flynn Avenue, Middleton Grange – Request for Raised Pedestrian Crossing

- Notes installation of a raised marked pedestrian crossing facility to be approved under delegated authority.
- Undertakes community consultation including Transit Systems, prior to installation.

Item 11 – Items Approved Under Delegated Authority

Notes the traffic facilities approved under delegated authority in the period between August 2023 and September 2023.

REPORT

This report presents the recommendations from the Liverpool Local Traffic Committee meeting held on 20 September 2023. At the meeting, the Committee considered eleven (11) agenda items, and fifteen (15) general business items.

The agenda items include imposition of a 5-tonne load limit on the section of Nuwarra Road south of Newbridge Road, as resolved by Council at its on 30 August 2023 Ordinary Meeting.

The imposition of the load limit requires the Traffic Committee's support. Hence the item was presented to Traffic Committee and the Committee has supported the imposition of the load limit. The required community consultation would be carried out in October 2023, for the required transport management plan, that needs to be submitted to TfNSW for endorsement to be completed in November 2023. Subject to the approval process, the load limit could be imposed early next year.

A copy of the meeting minutes along with an Attachment Booklet are included in **Attachments 1 and 2**.

Comments on the general business items with recommended actions are as follows:

General Business Items

GB1 - Sadlier Avenue and Celebration Road, Sadlier- Request for speed humps

The Committee noted that the results of two recent speed classifications, across two road sections indicated that the 85th percentile speeds are within the acceptable limit and installation of raised thresholds are not warranted at this stage.

GB2 – Mackellar Street, Casula – Traffic Speeding Concern

The Committee noted that recent speed classification near House No. 39 indicates that there is no speeding issue.

Council to undertake additional speed classifications close to House No. 27 Mackellar Street to determine whether traffic calming treatments are required.

GB3 - Hume Highway and Leacocks Lane (N) intersection, Casula – Request for Traffic Management Improvements

Council to undertake traffic counts and assess the performance of the Leacocks Lane approach at its intersection with Hume Highway, during the peak periods. The result of the performance analysis will be forwarded to TfNSW for consideration of the requested line marking.

GB4 - 483 Denham Court Road Leppington – Request for guard rail extension

The Committee noted that a road safety audit carried out as part of Denham Court Road Upgrade did not identify a need for guard rail in front of the subject property.

Council to monitor traffic conditions along the subject road section and if required reconsider the request to extend the existing guard rail to the front of the property.

GB5 – Fifteenth Avenue, Upgrade Austral – Status of the Proposed Upgrade

Council to note the status of the planned Fifteenth Avenue Upgrade and associated upgrade features, as outlined in the report.

GB6 – Middleton Drive extension to Aviation Road, Middleton Grange – Status of the Proposed Extension

Council to note the status of the planned Middleton Drive extension to Aviation Road, Middleton Grange, as outlined in the report.

GB7 – Elizabeth Drive and Devonshire Road, Kemps Creek - Status of the Proposed Interim Roundabout

Council to note that TfNSW has commenced installation of an interim roundabout at the intersection to be completed by early next year.

GB8 – Western Sydney Parklands – Western Sydney Parklands – Request for Installation of Wildlife Advisory Signs

Council to work with Western Sydney Parklands, to identify locations and install wildlife advisory signs on relevant streets.

GB9 – Grimson Crescent, Liverpool – Road Safety Concerns

Council to note that the previously approved central line marking with rumble bars and parking restrictions at the intersection of Grimson Crescent and Park Road will be installed over the next two months.

GB10 - Camden Valley Way, Leppington at its intersection with Guild Avenue – Installation of Wire Fence in Central Median

Council to note that TfNSW will be installing wire fence in the central median along the section of Camden Valley Way at its intersection with Guild Avenue, Leppington, in mid-October 2023, to prevent right turn movements through the central median.

GB11 – Conversion of Streets to One-way Streets To Improve Traffic and Parking Arrangement

Council to investigate streets that could be changed to one-way streets to improve traffic and permit on-street parking.

GB12 – Epsom Road, Chipping Norton - Concerns about Illegal Heavy Vehicle Movements

Council to note that illegal heavy vehicle movements such as along Epsom Road, has requested the Police to include the street in their patrol and enforcement.

GB13 – Bravo Avenue and Bird Walton Avenue, Middleton Grange – Concerns about On-street Parking

Council to investigate the concerns and consult with residents to identify whether additional parking restrictions are required, for further action.

GB14 – Curlewis Street and Mernagh Street, Ashcroft – Request for Information on Road Maintenance

Council to provide information to the Local Member's office on when road resurfacing is scheduled to be carried out.

GB15 – Spencer Road, Cecil Hills – Request for Update to Principal of Cecil Hills Public School

Council to note that an update has been provided to principal of Cecil Hills Public School on the status of the approved installation of a kerb blister island near its intersection with Leopold Street.

FINANCIAL IMPLICATIONS

The actions contained in the minutes will be funded as outlined in the table below:

Item	Description	Funding, Indicative Cost and Timing
1	Sarah Hollands Drive, Carnes Hill – Proposed Central Median Island	Funding – Developer. No cost to Council. Timing – Dependent on the developer's construction program.
2	Elizabeth Hills – Proposed Local Area Traffic Management	Funding – Staged implementation. Financial implication to be provided at future meetings, when staged installations are considered. Indicative Cost – Cost estimate to be prepared as part of stage implementation.

		Timing – To be determined after community consultation and future approvals.
3	First Avenue and Nineteenth Avenue Intersection, Hoxton Park - Proposed Road Extension	Funding – Council's Capital Budget Indicative Cost – Cost estimate to be prepared as part of the detailed design. Timing – Subject to funding allocation
4	Nuwarra Road, Moorebank – Proposed 5-Tonne Load Limit	Funding – TfNSW block grant to Council Indicative Cost – \$4,000 Timing – March 2024
5	Liverpool Public School Development – Proposed Traffic Facilities	Funding – Developer (NSW School Infrastructure). No cost to Council. Timing – Dependent on the developer's construction program.
6	Yarrunga Street and Kookaburra Road (N), Prestons – Half Road Reconstruction Signs and Linemarking Scheme	Funding – Council's Capital Budget Program Indicative Cost – Cost estimate to be prepared as part of detailed design. Timing – Subject to funding allocation
7	Pacific Palms Circuit, Hoxton Park – Request for Raised Threshold	Funding – No financial implication.
8	Edmondson Avenue Upgrade, Austral - Proposed Signs and Line Marking Scheme	Funding – NSW Government Special Infrastructure Contribution Grant Funding Indicative Cost – \$34 million Timing – Staged construction from third quarter of 2024
9	Fourth Avenue and Gurner Avenue, Austral – Proposed Traffic Facilities	Funding – Developer Indicative Cost – No Cost to Council Timing – Dependent on the developer's construction program.
10	Flynn Avenue, Middleton Grange – Request for Raised Pedestrian Crossing	Funding – Developer Indicative Cost – No Cost to Council Timing – Dependent on the developer's construction program.
11	Items Approved Under Delegated Authority	Funding – TfNSW block grant to Council Indicative Cost – \$10,000 Timing – October 2023

CONSIDERATIONS

Economic	There are no economic considerations.
Environment	Promote an integrated and user friendly public transport service. Support the delivery of a range of transport options. Deliver a high-quality local road system including provision and maintenance of infrastructure and management of traffic issues.
Social	There are no social and cultural considerations.
Legislative	NSW Roads Act 1993 and Traffic Management Act.
Risk	The risk is deemed to be Low.

ATTACHMENTS

1. Minutes - Liverpool Local Traffic Committee Meeting - September 2023
2. Attachment Booklet - Liverpool Local Traffic Committee Meeting



**Liverpool Local Traffic Committee Meeting
Liverpool City Council – MS Team
Wednesday, 20 September 2023– 9.30am – 11.30am**

MINUTES OF LIVERPOOL LOCAL TRAFFIC COMMITTEE MEETING

20 September 2023

COMMITTEE MEMBERS

Clr Karress Rhodes	LCC - Chairperson
Raymond Tran	Transport for NSW (TfNSW)
Siva Balasubramaniam	TfNSW
Joanna Lonsdale	Acting Traffic Sergeant, Liverpool City Police Area Command
Lachlan Bush	Representative of the Member for Liverpool
Aaron Coiley	Representative of the Member for Holsworthy
Nicholas Petkovic	Representative of the Member for Leppington
Wayne Prior	Representative of the Member for Macquarie Fields

COMMITTEE TECHNICAL ADVISORS

Clr Betty Green	LCC
Clr Peter Harle	LCC
Charles Wiafe (CW)	Manager Transport Management, LCC
Patrick Bastawrous	Team Leader Transport Management
Mahavir Arya	Transport Engineer, LCC
Rachel Palermo (RP)	Road Safety Officer, LCC
Toula Athanasiou	Road Safety Officer, LCC
Parth Tiwari	Assistant Transport Engineer, LCC
Hannah Shilling	Representative of Transit System
Yooral Soni	Representative of Interline Bus Services

APOLOGIES

Tanya Davies	Member for Badgerys Creek
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WELCOME, ATTENDANCE, APOLOGIES AND OPENING	
The Chairperson opened the meeting at 9.35 am and acknowledged the traditional custodians of the land.	
DECLARATIONS OF INTEREST	
The Representative of the Member for Macquarie Fields advised that he is a local resident of the area where two general business items are listed to be discussed and he will participate in the discussion.	
CONFIRMATION OF PREVIOUS MINUTES	
CW advised that the Committee's recommendations from its meeting from 19 July 2023 were all approved by Council at its meeting on 30 August 2023.	
AGENDA ITEMS	
ITEM	SUBJECT
1	Sarah Hollands Drive, Carnes Hill – Proposed Central Median Island
2	Elizabeth Hills – Proposed Local Area Traffic Management
3	First Avenue and Nineteenth Avenue Intersection, Hoxton Park - Proposed Road Extension
4	Nuwarra Road, Moorebank – Proposed 5-Tonne Load Limit
5	Liverpool Public School Development – Proposed Traffic Facilities
6	Yarrunga Street and Kookaburra Road (N), Prestons – Half Road Reconstruction Signs and Linemarking Scheme
7	Pacific Palms Circuit, Hoxton Park – Request for Raised Threshold
8	Edmondson Avenue Upgrade, Austral - Proposed Signs and Line Marking Scheme
9	Fourth Avenue and Gurner Avenue, Austral – Proposed Traffic Facilities
10	Flynn Avenue, Middleton Grange – Request for Raised Pedestrian Crossing
11	Items Approved Under Delegated Authority
GENERAL BUSINESS ITEMS	
ITEM	SUBJECT
GB1	Sadlier Avenue and Celebration Road, Sadlier- Request for speed humps
GB2	Mackellar Street, Casula – Traffic Speeding Concern
GB3	Hume Highway and Leacocks Lane (N) intersection, Casula – Right turn pavement arrows
GB4	483 Denham Court Road Leppington – Request for guard rail extension
GB5	Fifteenth Avenue, Upgrade Austral – Status of the Proposed Upgrade
GB6	Middleton Drive extension to Aviation Road, Middleton Grange – Update
GB7	Elizabeth Drive and Devonshire Road, Kemps Creek – Update
GB8	Western Sydney Parklands – Request for installation of Wildlife signs
GB9	Grimson Crescent, Liverpool - Traffic Concerns
GB10	Camden Valley Way, Leppington at its intersection with Guild Avenue – Installation of Wire Fence in Central Median
GB11	Conversion of Streets to One-way Streets To Improve Traffic and Parking Arrangement

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| GB12 | Epsom Road, Chipping Norton - Concerns about Illegal Heavy Vehicle Movements |
| GB13 | Bravo Avenue and Bird Walton Avenue, Middleton Grange – Concerns about On-street Parking |
| GB14 | Curlewis Street and Mernagh Street, Ashcroft – Request for Information on Road Maintenance |
| GB15 | Spencer Road, Cecil Hills – Request for Update to Principal of Cecil Hills Public School |

Meeting Close 12:16pm

ITEM 1	Sarah Hollands Drive, Carnes Hill – Proposed Central Median Island
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INTRODUCTION

Council has approved the construction of 13 townhouses at the corner of Kurrajong Road and Pioneer Drive, Carnes, Hill. The development consent (DA-598_2016) includes installation of a central median island in Sarah Hollands Drive between Kurrajong Road and Stonequarry Way.

The developer has submitted a detailed design of the median island, approximately 110m long and varying widths between 0.6m to 3.2m, and two kerb blister islands along the western side of Sarah Hollands Drive, in accordance with TfNSW and Austroads guidelines. The Committee is requested to support installation of proposed central median island and two kerb blisters as indicated in the Attachments 1.1- 1.4.

ASSESSMENT

Sarah Holland Drive between Kurrajong Road and Stonequarry Way, is a north-south collector road approximately 130m long and 11.8m wide with the default urban speed limit of 50km/h. The road carries a high traffic volume as it provides access to Carnes Hill Market Place loading dock, Aldi, Holy Spirit Primary School and adjoining residential properties and side streets. A locality map is as indicated below.



At the July 2023 meeting, the Committee endorsed installation of a raised threshold in Sarah Hollands Drive on approach from Kurrajong Road for implementation of a 40km/h High Pedestrian Activity Area (HPAA) within the Carnes Hill Shopping Precinct. The central median island would align with the raised threshold and be transitioned to the existing splitter island at the Kurrajong Road and Sarah Holland Drive intersection to form an entry treatment into the HPAA.

As indicated above, detailed design of the central median has been prepared and includes the following:

- Installation of approximately 110m long centre median with varying widths of 0.6m to 3.2m.
- Installation of approximately 50m dedicated right turn lane into Carnes Hill Marketplace loading dock.

- c) Installation of two blister islands two kerb blisters on the western side in the Sarah Hollands Drive to provide sheltered parking lane.
- d) Associated signs and line marking as indicated in the Attachments 1.1-1.4

COMMITTEE DISCUSSION

The Committee discussed and noted that the median island is proposed to restrict right turn movements in front of an approved residential development as outlined above.

The TfNSW representative requested that the turning path of delivery vehicles in and out of the adjoining shopping centre loading dock is to be reviewed to ensure that the movements would not interfere with the proposed median island.

The Committee supports the installation of a central median island, two blister islands and associated signs and line markings in Sarah Holland Drive, between Kurrajong Road and Stonequarry Way, as shown in the Attachments 1.1- 1.4.

COMMITTEE RECOMMENDATION

That the Committee supports the installation of a central median island, two blister islands and associated signs and line markings in Sarah Holland Drive, between Kurrajong Road and Stonequarry Way, as shown in the Attachments 1.1- 1.4.

Council to review the revised swept path of delivery vehicles in and out of the adjoining shopping centre loading dock and submits to TfNSW for its review prior to installation.

ITEM 2 Elizabeth Hills – Proposed Local Area Traffic Management**INTRODUCTION**

At its February 2023 meeting, the Committee was advised on the existing traffic conditions in Elizabeth Hills and noted Council's proposal to carried out a Local Area Traffic Management (LATM) study.

Council engaged a traffic consultant to undertake the LATM study, which included speed classifications, assessments to identify traffic facilities to improve traffic conditions along Regentville Drive and to provide traffic calming devices on other adjoining streets. This is to ensure reduce traffic speed and improve residential amenity. The draft Elizabeth Hills LATM has been prepared and submitted to the Committee for endorsement as indicated in Attachments 2.1-2.6.

Community consultation is to be undertaken after Council has accepted the Committees recommendation.

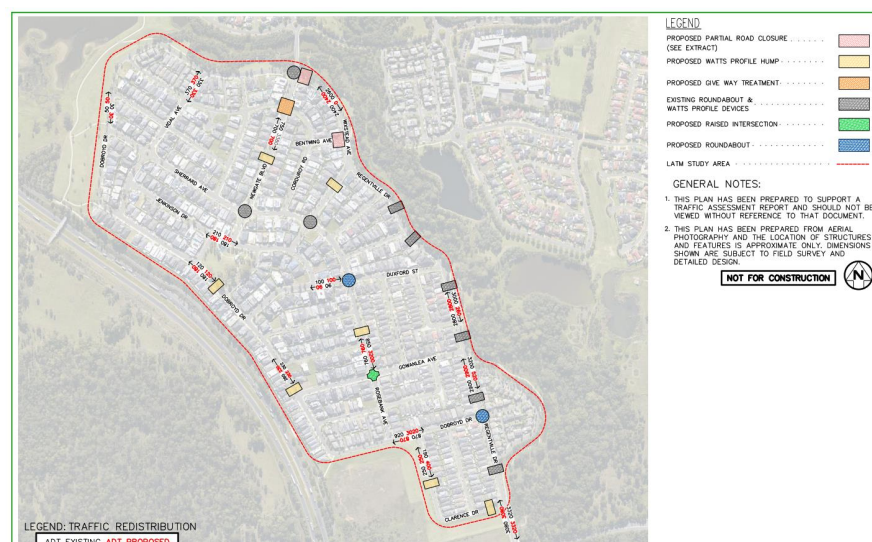
ASSESSMENT

Council has been receiving representations from the State Members of Parliament, Councillors and Elizabeth Hills residents concerning traffic conditions along Regentville Drive.

In response to these representations, Council engaged a traffic consultant to undertake the LATM study, to assess traffic conditions, including traffic volume, speed, crash history, community concerns and to identify proposed traffic facilities, to reduce traffic speed, improve traffic conditions and residential amenity.

As an input classification was carried out across sections of the key local street and collector roads. Road safety in Elizabeth Hills was assessed, considering the crashes recorded in TfNSW Crash Database of the last 5-year period ending 2022.

Based on the above traffic characteristics, the consultant has prepared a draft LATM proposal along with recommended traffic devices. The proposal which would be delivered in stages, subject to community consultation and availability of funds. A locality map indicating proposed traffic devices is indicated below.



The plan includes the following details of the proposed traffic facilities:

Regentville Drive

The street has six existing raised thresholds. The study proposes a roundabout at the intersection with Dobroyd Drive. A raised threshold is also proposed at the existing roundabout at Newgate Boulevard to restrict southbound traffic entering into Wixstead Avenue.

Newgate Boulevard

The street has existing roundabouts at the intersection with Wixstead Avenue and Rosebank Avenue/Sherrard Avenue. The study proposes a raised threshold in the mid-block section between Rosebank Avenue and Sherrard Avenue and Antrim Drive/ Corduroy Road. A give way control is also proposed at the Antrim Drive/ Corduroy Road intersection.

Rosebank Avenue

The street has existing roundabouts at the Newgate Boulevard/ Sherrard Avenue and Wixstead Avenue intersection. The study proposes a roundabout at the Duxford Street and raised safety platform at the Gowanlea Avenue intersections. A raised threshold is also proposed in the mid-block section of Duxford Street and Gowanlea Avenue.

In addition, raised thresholds are also proposed at the following locations:

- Dobroyd Drive, between Vermont Avenue and Montadale Avenue, and north of Gowanlea Avenue
- Clarence Drive, in the north/south mid-block section, between Regentville Drive and Pipistrelle Avenue.

Subject to Committee's support, Council would seek community feedback on the Elizabeth Hills LATM study report proposal, prior to its staged implementation.

COMMITTEE DISCUSSION

The Committee discussed and noted that the Elizabeth Hills LATM study report has been prepared to reduce through traffic along Regentville Drive and to address traffic speed and conflict along a number of road sections in the Elizabeth Hills residential area. The members requested a copy of the Elizabeth Hills LATM study report, and that community consultation would be carried out.

The TfNSW representative outlined that the proposed restricted left turn movements from Newgate Boulevard into Regentville Drive requires design modifications and directional signs to inform motorists of the proposed restriction.

CW advised that a copy of the report would be emailed to the technical members and Transit Systems. After the community consultation, detailed designs would be carried out and resubmitted to the Committee for support, prior to staged installations.

COMMITTEE RECOMMENDATIONS

That the Committee notes:

- The proposed treatments outlined in the Elizabeth Hills LATM study report as indicated in Attachments 2.1-2.6.
- Council to undertake community consultation and its outcome with detailed designs to be presented in future meeting prior to staged installation.
- The Elizabeth Hills LATM study report to be distributed to technical members and Transit Systems for their information.

ITEM 3	First Avenue and Nineteenth Avenue Intersection, Hoxton Park - Proposed Road Extension
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INTRODUCTION

At its May 2023 meeting, the Committee considered ongoing concerns about through traffic movement along Lismore Street and recommended that Council to undertake community consultation of its proposal to extend First Avenue to Nineteenth Avenue to provide one-way southbound direct access.

Community consultation has been carried out and shows strong support from local residents for the extension. A concept plan of the proposal is indicated in Attachment 3.

Council has also received representation requesting a 5-tonne load limit be imposed in Lismore Street, to ban heavy vehicles using the street as a throughfare.

The Committee is requested to support extension of First Avenue to Nineteenth Avenue to provide one-way southbound direct access and the request for imposition of a 5-tonne load limit along Lismore Street.

ASSESSMENT

Over the last twelve months, Council has been receiving ongoing concerns from Lismore Street residents about traffic speed and through traffic along the street. At its June 2023 Ordinary meeting, Council approved, on the recommendation of the May 2023 Traffic Committee Meeting, installation of a midblock asphalt speed hump in Lismore Street and installation of a kerb blister at the intersection of Pacific Palms Circuit and Lismore Street to address traffic speeding. Council also approved the proposed extension of First Avenue to Nineteenth Avenue, subject to the outcome of community consultation. A locality map is indicated below.



In July 2023, Council distributed 110 letters to residents along Lismore Street, First Avenue (South of Lismore Street), Nineteenth Avenue (East of Pacific Palms Circuit) and Pacific Palms Circuit (between Nineteenth Avenue and Lismore Street). The residents were requested to provide feedback on the Committee's supported proposal of extending First Avenue to Nineteenth Avenue, that is linking the two existing cul-de-sacs to allow for one-way southbound traffic movements.

Council has received 46 responses (approximately 42%), 43 responses were in support of the proposal and 3 responses from the residents along Nineteenth Avenue were against the proposal. Residents in support of the proposal were predominantly from Lismore Street and Pacific Palms Circuit.

Some residents indicated that traffic congestion in First Avenue and Lismore Street is predominantly associated with the operation of the existing traffic signals at Hoxton Park Road and First Avenue intersection. It is noted at its May 2023 meeting, the Committee supported demarcation of two northbound lanes along First Avenue, between Hoxton Park Road and Twentieth Avenue to address traffic congestion concerns in First Avenue and Lismore Street. Detailed design is still in progress.

In addition to the closed road re-opening, Council has received representation from a Lismore Street resident requesting 5 tonne load limit to be imposed on Lismore Street, as he considers that heavy vehicle traffic is contributing towards road congestion in the street.

Previously, Lismore Street and First Avenue was the only route to access Hoxton Park Road from Pacific Palms Circuit. Since the extension of Glen Innes Road is the second alternative route to access Hoxton Park Road.

A recent vehicle classification count indicates that the street is carrying a daily average volume of 230 heavy vehicle, including bus movements of bus route 854. The heavy vehicles have no destinations in the street and could be banned or minimise. Hence the proposal to impose a 5-tonne load limit, in accordance with Section 115 of the Roads Act 1993.

Alternate detour route for these heavy vehicles could be via Glen Innes Road to access Hoxton Park Road, or other streets where the vehicles have a destination. This route passes through the frontage of Malek Fahd School with a 40km/h school zone.

The load limit will still permit heavy vehicles that have destinations in the street and local buses (Bus Route 854). The proposed load limit requires TfNSW endorsement of a Transport Management Plan. The plan will be prepared and submitted to TfNSW for endorsement, prior to imposition.

COMMITTEE DISCUSSION

The Committee discussed and noted that the extension of First Avenue to Nineteenth Avenue to permit one-way southbound movement will reduce the current high through traffic volume along Lismore Street, and the arrangement could divert approximately half of the current volume.

In addition, the 5-tonne load limit is proposed to ban heavy vehicle movement along the residential street. Councillor Harle requested that in the long term, road extension from Coffs Harbour Avenue to Yarrowa Street is to be investigated. Additional consultation is to be carried out to seek feedback from First Avenue residents prior to the proposed works.

The Committee noted that Lismore Street residents supports the road reopening however, additional consultation is to be carried out to seek feedback from First Avenue residents prior to the proposed works.

The TfNSW representatives noted that the 5-tonne load limit requires a Transport Management Plan for its review, prior to implementation.

COMMITTEE RECOMMENDATIONS

That the Committee:

- Supports further community consultation for the extension of First Avenue to Nineteenth Ave to permit one-way southbound movement as shown in Attachment 3.
- Notes the proposed 5-tonne load limit in Lismore Street, and Council is to submit a Transport Management Plan to TfNSW for its review, prior to implementation.

ITEM 4	Nuwarra Road, Moorebank – Proposed 5-Tonne Load Limit
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INTRODUCTION

Council has been receiving representations to consider arrangement to reduce heavy vehicles movement along Nuwarra Road, south of Newbridge Road. Previously this road section used to be a designated heavy vehicle route, however earlier this year, on the recommendation of Council the heavy vehicle designation has been removed.

Council has received further representation and the Committee is requested to support a 5-tonne load limit to be imposed along Nuwarra Road.

ASSESSMENT

Nuwarra Road is a collector or local road through the Moorebank residential area between Heathcote Road and Alfred Road, under the care and control of Council.

The road section between Newbridge Road and Heathcote Road is collector road, classified as an unclassified regional road, while the section north of Newbridge Road is a local road and has a 3-tonne load limit implemented over 20 years ago.

The road section south of Newbridge Road is generally a two-lane road, with a single traffic lane in each direction. It has signalised intersections with Newbridge Road, Maddecks Avenue, Brickmakers Drive and Heathcote Road. The carriageway at these signalised intersections have dedicated turning lanes. In addition, the road approaches to Newbridge Road and Heathcote Road have road widenings to meet traffic signal requirements.

Previously, due to its classification as an unclassified road and its proximity to the Chipping Norton industrial area, Transport for NSW (TfNSW) published heavy vehicle routes, designated Nuwarra Road, south of Newbridge Road, as a designated B-double route, providing a link between two classified state roads, i.e. Newbridge Road and Heathcote Road and convenient access to the M5 Motorway via Heathcote Road.

Due to this arrangement, the section of Nuwarra Road, south of Newbridge Road, attracts heavy vehicle movements. However, as a residential road, Council previously received representations to consider options to reduce heavy vehicle movements, along the road to improve residential amenity. Council staff have continued representations to the NHVR, and approximately six months ago, the Nuwarra Road section was decommissioned from the NHVR's record as a B-double route.

As indicated above Nuwarra Road south of Newbridge Road, is no longer a designated B-double route. Hence, Council is no longer supporting applications for Nuwarra Road to be used as a heavy vehicle route for applications submitted through the National Heavy Vehicle Regulator. This excludes vehicles 4.6m high, 2.5m wide, 19m long and up to 50 tonnes.

Whilst Nuwarra Road is no longer designated as a B-double route, it is still attracting through traffic including unrestricted heavy vehicle movements such as 19m semi-trailers.

To reduce heavy vehicle movements further, the Committee is requested to consider and support a 5-Tonne load limit along the road. This would require preparation of Transport Management Plan (TMP) to be submitted to TfNSW for approval.

Council has recently undertaken 7-day traffic classifying intersection counts along Nuwarra Road intersection between Brickmakers Drive and Heathcote Road. In addition, origin destination survey has also been undertaken and the results have been included in the TMP

to be submitted to TfNSW for its endorsement. It is noted that Brickmakers Drive has an existing 5-tonne load limit.

COMMITTEE DISCUSSION

The Committee discussed and noted the above-mentioned representations for a load limit to be imposed along the road to reduce traffic conflicts and improve residential amenity.

The TfNSW representative outlined that the agency has no objection to the load limit and the required Transport Management Plan is to be submitted for its review prior to implementation.

The Committee noted that the load limit would affect heavy vehicle drivers that travel along the road and appropriate notification involving the placement of variable message boards on the northern and southern approaches is to be carried out prior to implementation.

In addition, local residents to be notified via a letter box drop for their comments.

COMMITTEE RECOMMENDATIONS

- That the Committee supports the proposed 5-tonne load limit along Nuwarra Road, south of Newbridge Road, subject to the submission of a Transport Management Plan (TMP) to TfNSW for its review prior to implementation.
- Council to submit a 5-tonne load limit signposting plan to TfNSW and Police for approval.
- Council to undertake community consultation including placement of Variable Message Boards along the northern and southern approaches along the road section.

ITEM 5**Liverpool Public School Development – Proposed Traffic Facilities****INTRODUCTION**

At its July 2023 meeting, the Committee supported in-principle, installation of raised marked pedestrian crossing across Lachlan Street along with two pedestrian refuges across sections of Lachlan Street/Forbes Street and Lachlan Street/Drummond Street, as part of the construction of the new Liverpool Public School.

NSW School Infrastructure (NSWSI) is the agency responsible for the school construction and has engaged a contractor, ADCO, to undertake the construction. The contractor has provided clarification that as part of the first stage, the school requires installation of a children crossing and on pedestrian refuge, with revised design drawings.

The Committee is requested to support installations of the installation of a children crossing and two pedestrian refuges as indicated in Attachments 5.1-5.3.

ASSESSMENT

As indicated above at its July 2023 meeting, the Committee considered and supported in-principle, installation of raised marked pedestrian crossing across Lachlan Street along with two pedestrian refuges across sections of Lachlan Street/Forbes Street and Lachlan Street/Drummond Street, as part of the construction of a new Liverpool Public school.

The contractor has indicated that the school is being constructed in two stages. As part of the first stage the contractor has submitted designs drawing of the development consent specified for the traffic facilities.

The concerns raised includes the following and a need for a road safety audit to be conducted on the design of the traffic facilities:

Raised Pedestrian Crossing - The proposed raised marked pedestrian crossing is not required for Stage 1 and is not required for operation outside school hours. Hence, a Children Crossing has been proposed and will follow with an application to TfNSW for a dedicated school crossing supervisor.

Installation of a Children Crossing would reduce impacts for traffic condition and on-street parking along Lachlan Street and is considered appropriate. The crossing will be monitored and if required, NSWSI will be requested to upgrade the children crossing to a raised or marked pedestrian crossing, at its cost.

Pickup and drop off area - Staff will be directed via internal pathways within the school grounds to the pick-up and set down area. Pick up and drop off activities inside the driveway would be monitored to ensure that parents do not wait outside the driveway in Lachlan Street.

Pedestrian fencing - The consultant has indicated pedestrian fencing is not required and has proposed bollards close to the Lachlan Street and Hart Street roundabout. Council will request NSWSI to reassess for the need for pedestrian fencing, prior to installation.

Pedestrian refuge at Lachlan Street/Drummond Street and Lachlan Street/Forbes Street

Stage 1 of the development requires installation of a pedestrian refuge at above intersection locations. The proposed children crossing in Lachlan Street is located close to the intersection, with right and left turning vehicles from Drummond Street may find it difficult to turn due to

queuing across the intersection during school peak periods. Hence, the contractor is requesting installation of a "KEEP CLEAR" pavement marking across the intersection, as shown in design drawings.

Timed Parking outside school gate - While majority parents would be using the new public-school driveway for students' pick up and drop off area, the contractor proposing ¼ P timed parking outside the school gate for pickup/drop off for some parents who need additional dwell time. The School would communicate with parents and monitor the appropriate use of these car spaces.

A Road Safety Audit has been undertaken by the consultant and Council has reviewed the detailed designs drawings with the following recommendations:

- a) Advanced warning sign for westbound drivers on Lachlan Street to the children's crossing.
- b) R5-15 signs on the southern kerb line of Lachlan Street.
- c) Management of kerbside stopping and passing clearance for traffic in eastbound direction of Lachlan Street in approach to Hart Street roundabout - No stopping to be extended and timed during school peak time.
- d) Warning sign for southbound traffic on Drummond Street to the children's crossing - Left arrow to be provided.
- e) Management of kerbside stopping on the southern side of Lachlan Street to the west of the Hart Street roundabout, with a need for additional No Stopping sign and C3 yellow line
- f) Section of Lachlan Street between the children's crossing and the roundabout with Hart Street - Double BB centre line to be installed and replace "Keep left" sign with "left turn only" signs.
- g) Pedestrian refuge on Drummond Street - Watch for Pedestrian signs needs to be installed along with moving kerb ramp and cut through further back including pedestrian fencing.
- h) Childrens crossing, speed management and refuge spaces for crossing supervisors - Generally Keep clear signs are installed for emergency vehicle movement and at the intersections of side street and approach to traffic signal.
- i) Midblock of Lachlan Street from Drummond Street to the west - Double BB centre line to be installed as per RSA.

COMMITTEE DISCUSSION

The Committee discussed and noted that as part of the construction of a new public school at the corner of Lachlan Street and Burnside Drive, NSW School Infrastructure is required to install traffic facilities including a Children Crossing and a pedestrian refuge as outlined above.

The TfNSW representative expressed concern that the proposed location of the children crossing across Lachlan Street and is close Lachlan Street/Drummond Street intersection and would have significant impact on turning movements at the intersection and traffic conflicts at the Children Crossing. The representative recommended that the item be deferred for an out of session meeting to be held with developers' representatives and for further consideration.

COMMITTEE RECOMMENDATIONS

That the Committee notes:

- Design drawings of the proposed Children crossing across Lachlan Street and pedestrian refuge at Lachlan Street/Drummond Street and associated signs and line marking scheme submitted to the technical members and discuss at an out of session meeting for support.
- Community consultation to be conducted prior to installations of the traffic facilities.

ITEM 6	Yarrunga Street and Kookaburra Road (N), Prestons – Half Road Reconstruction Signs and Linemarking Scheme
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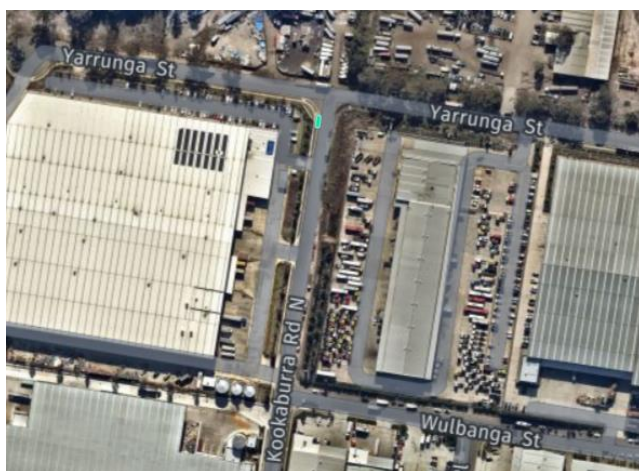
INTRODUCTION

Council has engaged a consultant, to prepare detailed design drawings for half road reconstruction of approximately 130m of Yarrunga Street (southern side) and approximately 205m of Kookaburra Road (N) (eastern side).

The consultant has provided design drawings of the required traffic facilities including signs and line marking plan. as indicated in Attachments 6.1 and 6.2, and the Committee is requested for its support.

ASSESSMENT

Yarrunga Street between Bernera Road to cul-de-sac, is an east-west industrial road approximately 1.05km long with a carriageway width of approximately 12m. Kookaburra Road (N) between Yarrunga Street and Wulbunga Street is a north-south industrial road approximately 220m long with carriageway width of approximately 13m. Yarrunga Street and Kookaburra Road (N) forms a T-intersection, with Kookaburra Road (N) being the terminating street. Both streets form part of B-Double heavy vehicle routes that service the Prestons Industrial Area. A locality map is shown below.



Council is undertaking half road reconstruction on the south-east corner of the intersection. The consultant has provided design drawings of the required traffic facilities including signs and line marking.

The detailed design includes the following:

- Half road pavement reconstruction
- Installation of two median islands approximately 20m long and 0.6m wide in Yarrunga Street and Kookaburra Street (N) intersections and separation lines beyond the median
- Installation of 1.5m wide paved footpath
- Installation of kerb and gutter

- e) Installation of edge lines to separate travelling and 2.5m wide parking lanes
- f) Installation of after hour truck parking signs along frontages of Yarrunga Street and Kookaburra Road (N)
- g) Associated signs and line marking as indicated in the Attachments 6.1 and 6.2.

Detailed design of the half road reconstruction including swept path analysis has been prepared in accordance with Austroads and TfNSW road design guide. The Committee is requested to support the signs and linemarking scheme as indicated in Attachments 6.1 and 6.2.

COMMITTEE DISCUSSION

The Committee discussed and supported the installation of two median islands and associated signs and line markings along Yarrunga Street and Kookaburra Street (N).

The TfNSW representative requested that a 'Keep Left' signs are to be installed on the median islands approaches if possible.

COMMITTEE RECOMMENDATION

That the Committee supports the installation of two median islands and associated signs and line markings along Yarrunga Street and Kookaburra Street (N) as shown in the Attachments 6.1 and 6.2.

ITEM 7	Pacific Palms Circuit, Hoxton Park – Request for Raised Threshold
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INTRODUCTION

Council has received representations including from a Member of Parliament concerning traffic speeding with a request for installation of raised thresholds across the section of Pacific Palms Circuit between White Cliffs Avenue and Tilpa Place.

Council has undertaken required assessment including speed classification. The Committee is requested to discuss the request for installation of raised thresholds across the Pacific Palms Circuit section.

ASSESSMENT

Pacific Palms Circuit is a loop road, approximately 2.7km long, that provides access to residential properties and two Schools in Hoxton Park. The section of Pacific Palms Circuit between White Cliffs Avenue and Tilpa Place is approximately 140m long and has a carriageway width of approximately 7m. The street section is fairly straight with brick paved indented parking on the eastern side and forms part of a school bus route to Hoxton Park Public School.

The street has nearby traffic calming devices including a roundabout at its intersection with Tibbooburra Road, approximately 30m north of Tilpa Place and a raised marked pedestrian crossing approximately 50m south of White Cliffs Avenue. A locality map is shown below.



From TfNSW Crash Database of the last 5-year period ending 2022, indicates there was one recorded crash and speed was not a contributing factor. Council has carried out speed classification which indicates the road section is carrying volume of approximately 3857 vehicles/day with 85th percentile of 52km/h which is within the acceptable tolerance for a 50km/h speed limit.

As the speed classifications indicate that there is no speeding issue, treatment is not warranted at this location. In the meantime, the Police have been requested to include Pacific Palms Circuit in their highway patrol and speed enforcement.

COMMITTEE DISCUSSION

The Committee noted that the 85th percentile speed of 52km/h is within the applicable 50km/h speed limit and does not require engineering treatment at this stage.

COMMITTEE RECOMMENDATION

That the Committee noted that installation of a raised threshold is not warranted at this location, at this stage.

ITEM 8	Edmondson Avenue Upgrade, Austral - Proposed Signs and Line Marking Scheme
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INTRODUCTION

Council has been successfully allocated \$34 million under the Southwest Sydney Special Infrastructure Contribution (SIC) Program to carry out Stage 1 upgrade of Edmondson Avenue between Bringelly Road and Seventh Avenue, Austral.

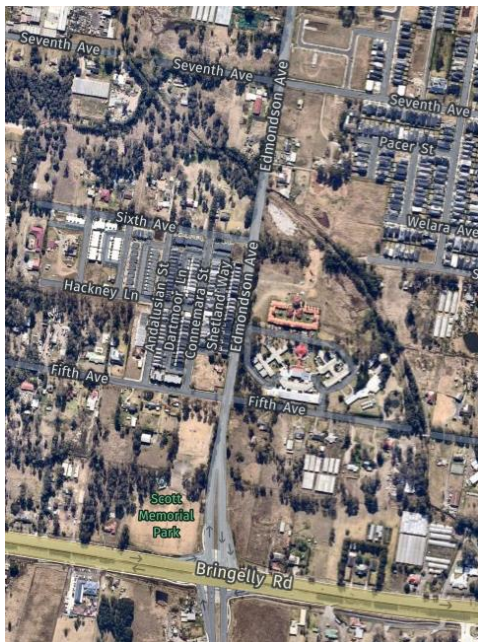
Council has engaged a consultant, Stantec, to prepare design drawings for road upgrade from the current two-lane rural road to a four-lane divided urban standard road with the kerbside lanes to be used as future transit lanes.

The project includes installation of traffic signals at the Edmondson Avenue and Fifth Avenue intersection and the design of the signalised intersection have been forwarded to TfNSW for the agency's approval. The Committee is requested to support Stage 1 road upgrade and associated signs and line marking scheme and bus stops as shown in Attachments 8.1- 8.4.

ASSESSMENT

Edmondson Avenue is currently a two-lane rural road between Bringelly Road and Fifteenth Avenue which provides the main north-south access to the Austral precinct. It is planned to be part of Western Sydney rapid bus network and a future transit boulevard link between Fifteenth Avenue and Leppington train station.

To accommodate the forecasted additional traffic from residential developments within Austral, Council has adopted a staged approach to upgrade and widen Edmondson Avenue between Bringelly Road and Fifteenth Avenue. Funding has been allocated to commence Stage 1 construction works as shown in Attachment 8.1. A locality map of the road improvement sections is as shown below.



As indicated above, Council has engaged Stantec, to prepare the required concept/detailed designs for the road upgrade, from a two-lane rural road to a four-lane divided urban standard road. The project includes the following:

- a) Four traffic lanes with varying lane widths between 3.2m to 3.5m. Kerbside lanes to be used as future transit lanes;
- b) Landscaped central median approximately 5m wide with water sensitive landscaping treatment swale.
- c) 3m wide dedicated two-way cycleway along the western side of Edmondson Avenue.
- d) Paved footpath approximately 1.8m to 2m wide along both sides of Edmondson Avenue
- e) Intersection treatments including:
 - o Installation of traffic signals at Edmondson Avenue/Fifth Avenue,
 - o Restricted left in/left out only at Edmondson Avenue/Sixth Avenue,
 - o Restricted right turn and through movements at Edmondson Avenue/Seventh Avenue

Council would prepare the required Transport Management Plan (TMP) for the proposed restricted left in/left out only at Edmondson Avenue/Sixth Avenue intersection and the proposed restricted right turn and through movements at Edmondson Avenue/Seventh Avenue intersection and submit to TfNSW for endorsement.

Signs and line marking plan of the proposed Edmondson Avenue road upgrade between Bringelly Road and Seventh Avenue are as shown in Attachments 8.1- 8.4. The installation of traffic signals at the Edmondson Avenue and Fifth Avenue intersection and the design have been forwarded to TfNSW for the agency's approval.

The Committee is requested to support Stage 1 road widening and associated signs and line marking scheme as shown in Attachments 8.1- 8.4.

COMMITTEE DISCUSSION

The Committee discussed and noted that Edmondson Avenue is proposed to be upgraded in stages with Stage 1 between Bringelly Road and Seventh Avenue. The road upgrade includes proposed traffic signals at the Edmondson Avenue and Fifth Avenue intersection.

The TfNSW representative outlined that the signalised intersection and associated signs and line marking could affect the signs and line marking along the Stage 1 project and it is preferable that the traffic signals to be approved before approval of the remaining signs and line marking.

COMMITTEE RECOMMENDATION

The Committee notes:

- a) Edmondson Avenue Upgrade design and associated signs and line marking for Stage 1, as shown in Attachments 8.1- 8.4.
- b) Detailed design including the signalised intersection upgrade at Edmondson Avenue/Fifth Avenue be submitted to TfNSW for its approval.
- c) Council to undertake community consultation with local residents, businesses and schools, prior to the road upgrade.

ITEM 9**Fourth Avenue and Gurner Avenue, Austral – Proposed Traffic Facilities****INTRODUCTION**

At the November 2022 meeting, the Committee supported in-principle installation of a roundabout at the north-eastern corner of Fourth Avenue and Gurner Avenue and other traffic facilities as part of the adjoining Al-Faisal College expansion. The College was requested to submit detailed design for the Committee's support.

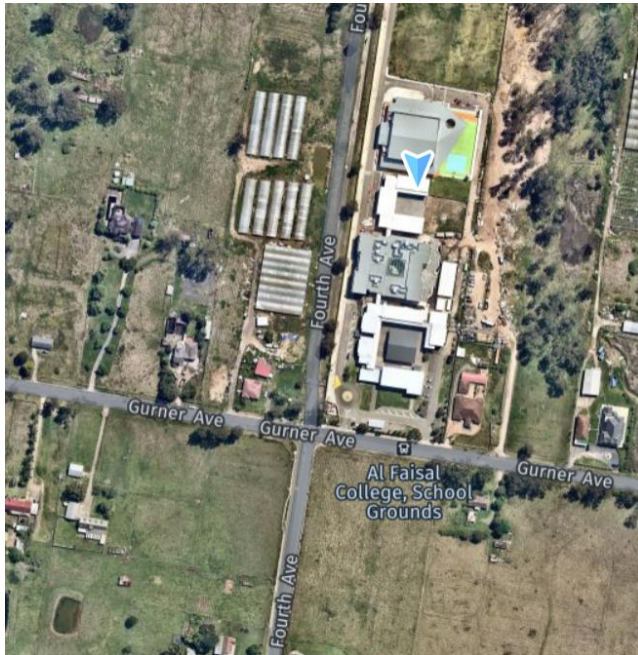
The college has provided detailed designs of the traffic facilities including a roundabout and a Children Crossing in Gurner Avenue. The Committee is requested to support the traffic facilities and associated signs and line marking scheme as indicated in Attachment 9.1-9.6.

ASSESSMENT

As indicated above, Al-Faisal College at the north-eastern corner of Fourth Avenue and Gurner Road has a consent condition which requires installation of a roundabout at the Fourth Avenue/Gurner Road intersection, children crossing and bus bay at the college frontage.

Fourth Avenue is one of the main north/south collector roads between, Bringelly Road and Gurner Road, planned to provide access to the urban development in the Austral release area.

Gurner Road is a predominately an east/west road also planned as a collector road to provide access to the Austral Release Area. Fourth Avenue and Gurner Road forms a four-way intersection at the south-western corner of the college. A locality map is as shown below.



The College has a proposal to increase student population to approximately 1200 students. To minimise traffic impacts of the college expansion and additional traffic expected from adjoining subdivisions, the expansion includes traffic management works.

As indicated above, the traffic management works include installation of:

- Roundabout and concrete splitter islands at the Fourth Avenue/Gurner Road intersection
- Children crossing
- Bus bays at the college frontage

The college has submitted a detailed design for these works for the Committee's consideration and support. These facilities are required to regulate turning movements at the Fourth Avenue/Gurner Road intersection which has the possibility of a Fourth leg being constructed to provide access to the landholding north of Gurner Road at the intersection. Additional residential developments are planned in the local area and with the College expansion, the roundabout is required.

In addition, with the College expansion, it is expected that there would be increased pedestrians crossing Gurner Road to the College, and hence, the need for a children's crossing.

The College does not have designated bus bays and with the planned expansion, the bus bay fronting the college, is required to ensure appropriate traffic flow.

The Committee is requested to support the proposed roundabout and children's pedestrian crossing and associated signs and linemarking scheme as shown in Attachment 9.1-9.6.

COMMITTEE DISCUSSION

The Committee noted and discussed installation of an interim roundabout at Fourth Avenue/Gurner Road intersection and a Children Crossing east of the roundabout.

The TfNSW representative outlined that the roundabout does not appear to have been designed to provide appropriate deflection for the existing 60km/h speed limit along Fourth Avenue. In addition, the Committee noted that the location of the Children Crossing could affect traffic movements at the roundabout and that a revised design with the crossing relocated further east is to be carried out.

The Committee noted that with the planned additional development, near the intersection, it may be appropriate for the intersection to be upgraded to a signalised intersection in future and Council may wish to carry out investigations for such a treatment.

COMMITTEE RECOMMENDATIONS

The Committee notes:

- a) Revised design for an interim roundabout with appropriate deflection or raised thresholds on the approaches and revised design of the children crossing to a location east of the College driveway, with required kerb and guttering, be submitted to the technical members for support.
- b) The revised design to be resubmitted to a future Traffic Committee Meeting for its support.
- c) Council to investigate upgrade of the roundabout to future traffic signals at the intersection.

ITEM 10	Flynn Avenue, Middleton Grange – Request for Raised Pedestrian Crossing
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INTRODUCTION

At its July 2023 meeting, the Committee discussed and supported in principle installation of a marked pedestrian crossing across the section of Flynn Avenue fronting Thomas Hassell College. The Committee's recommendation included for the College to submit pedestrian counts and modified design to showing a pedestrian gate.

The College has since submitted the requested additional information, and the Committee is requested to support the proposed raised marked pedestrian crossing across the section of Flynn Avenue fronting the Thomas Hassall College.

ASSESSMENT

Flynn Avenue is an east-west collector road between Cowpasture Road and the Western Sydney Parklands (WSP). The eastern section between Cowpasture Road and Kingsford Smith Avenue is being treated to reduce traffic speed. Two speed humps have been approved for installation across this road section.

The first one has been installed and the second one is scheduled to be installed, subject to funding. Residents on the western side between Kingsford Smith Avenue and the WSP, have been expressing concerns including representations to the Local Member of Parliament for Badgerys Creek for similar treatments to be installed to reduce traffic speed.

This road section provides a second access to the Thomas Hassell College as well as residential developments either side of the road and to the WSP.

As part of the recent College expansion, to reduce traffic speed along the section fronting the College, the consent condition includes installation of a raised threshold. However, as indicated at its July 2023 meeting, the Committee discussed and supported in-principle installation of a marked pedestrian crossing, in place of a raised threshold and requested the College to submit pedestrian counts and modified design to show a pedestrian gate for its consideration.

The location of the raised pedestrian crossing is 44m east of Gilruth Avenue in front of House Nos. 111-113 and changes are to be made within the adjoining College carpark to ensure a direct pedestrian access to a pedestrian gate. A locality map of the approximate location is shown below.



The pedestrian crossing requires 'No Stopping' restrictions on the approach and departure sides. This would impact on-street parking on the southern side and requires consultation with the residents prior to construction.

The College has provided recent pedestrian counts which indicates that 40 pedestrians in the morning peak period and 2 pedestrians on the afternoon peak period crosses Flynn Avenue at this location. During this time, traffic volumes combined in both direction is approximately 650veh/hr in the morning peak and 360veh/hr in the afternoon peak. The College has advised that after the installation, the crossing could attract a greater number of pedestrians.

The traffic characteristics meet the reduced warrant for the requested raised marked pedestrian crossing. The design drawings will be presented to the Committee at the meeting.

In addition, the College has to undertake review of existing street lighting with intention to provide flood lighting on the proposed marked pedestrian crossing. Detailed design drawings of the crossing and associated signs and line marking will submitted TfNSW for review and for community consultation to be carried out prior to installation.

COMMITTEE DISCUSSION

The Committee noted and discussed installation of a marked pedestrian crossing across a section of Flynn Avenue at the rear of the College.

The TfNSW representative requested a review of the detailed design drawings prior to finalisation and installation.

The representative for the Member for Leppington enquired why there was a need for additional consultation. CW advised that the consultation is to inform adjoining residents on the southern side of Flynn Avenue where parking restrictions would need to be installed as part of the raised pedestrian crossing.

COMMITTEE RECOMMENDATIONS

That the Committee notes:

- Detailed designs of the proposed raised marked pedestrian crossing facility to be submitted to TfNSW and all technical members including bus companies for their review and support, prior to installation.
- Council to undertake community consultation including Transit Systems, prior to installation.

ITEM 11	Items Approved Under Delegated Authority
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INTRODUCTION

This item provides a summary of minor traffic facilities that have been approved under the Liverpool Local Traffic Committee Delegated Authority by TfNSW and Police representatives over the two-month period, between August 2023 and September 2023.

Delegated Authority No.	Location	Description of Proposal
2023.038	Faulkner Way & Gallipoli Drive, Edmondson Park	Installation of No Stopping restriction
2023.039	Wonga Rd & Compton Ave, Lurnea	Installation of yellow No Stopping Lines
2023.040	Pacific Palms Circuit, Hoxton Park	Installation of yellow No Stopping Lines
2023.041	6 McGirr Pde, Warwick Farm	Installation of No Parking restriction
2023.043	23 Boundary Rd, Liverpool	Installation of No Stopping restriction
2023.044	19-25 Bigge St, Liverpool	Installation of No Parking restriction
2023.046	Jedda Rd, Prestons	Installation of Linemarking and No Stopping
2023.047	6 Willow St, Casula	Installation of No Parking restriction
2023.048	65 Governor Macquarie Dr, Chipping Norton	Installation of No Parking restriction
2023.049	5-35 Yarrunga St, Prestons	Installation of No Stopping restriction
2023.052	Pearce St, Liverpool	Installation of No Parking restriction
2023.053	River Heights Rd, Pleasure Point	Installation of No Stopping and Yellow No Stopping lines
2023.054	Glengyle Court, Wattle Grove	Installation of No Parking restriction
2023.055	Wombeyan Court, Wattle Grove	Installation of No Parking restriction
2023.057	Gillespie St, Liverpool	Installation of No Parking restriction

COMMITTEE RECOMMENDATION

The Committee noted the above Delegated Authority applications approved by the NSW Police Force and TfNSW representatives over the two-month period between August 2023 and September 2023.

GENERAL BUSINESS ITEMS

ITEM	LOCATION/ISSUE	COMMENTS	COMMITTEE RECOMMENDATION
GB1	Sadlier Avenue and Celebration Road, Sadlier - Request for speed humps	<p>Council has received representations concerning traffic speeding with a request to install speed humps across sections of Sadlier Avenue and Celebration Road.</p> <p>Previous speed classification carried out in March 2022 across two sections of Sadlier Avenue, near House Nos. 37 and 81, indicates the 85th percentile speed of 60km/hr and 59km/hr is within the applicable 50km/hr speed limit. Speed classification have not been carried out across sections of Celebration Road.</p> <p>In response to the recent request, Council has carried out additional speed classifications across sections of Sadlier Avenue (North of House No. 114) and Celebration Road (near House No. 14) indicates the 85th percentile speed of 54km/hr and 53km/hr respectively and is within the applicable tolerance of a 50km/hr speed limit. As the speed classifications indicate that there is no speeding issue, treatment is not warranted at this location.</p> <p>As a related subject, the Committee is to note the recent fatal crash along a section of Sadlier Avenue. The crash is currently under police investigation.</p> <p>In the meantime, the Police have been requested to include Sadlier Avenue and Celebration Road in their highway patrol and speed enforcement.</p>	The Committee noted that the results of the speed classifications indicated that the speed is within the acceptable limit and installation of a raised threshold is not warranted at this stage.
GB2	Mackellar Street, Casula – Traffic Speeding Concern	<p>Council has received representation from the State Member for Macquarie Fields concerning traffic speeding and three road crashes as noted by residents along a section of Mackellar Street, over the last 12 months.</p> <p>Council has carried out speed classifications near House No. 39 which indicates the 85th percentile speed of 44km/hr and is below the applicable 50km/hr speed limit. As the speed classifications indicate that there is no speeding issue, treatment is not warranted at this location.</p>	The Committee noted that recent speed classification near House No. 39 indicates that there is no speeding issue, however additional counts would be undertaken close to House No. 27 Mackellar Street to determine

		Council to monitor the street and if required, would carry out additional speed classification close to House No. 27 Mackellar Street, to be presented at a future meeting.	whether traffic calming treatments are required.
GB3	Hume Highway and Leacocks Lane (N) intersection, Casula – Request for Traffic Management Improvements	<p>Council has received representation from the State Member of Macquarie Fields with requests to investigate traffic congestion particularly during peak periods and install line markings to provide dedicated turning lanes along Leacocks Lane at its intersection with Hume Highway.</p> <p>As Transport for NSW (TfNSW) owns and manages traffic signals on the NSW public road network, the requested line marking requires TfNSW approval.</p> <p>In addition, Council will carry out traffic counts and assess the performance of the Leacocks Lane approach at its intersection with Hume Highway, during the peak periods. The results would be forwarded to TfNSW for consideration of the requested line marking.</p>	The Committee noted that Council will carry out traffic counts and assess the performance of the Leacocks Lane approach at its intersection with Hume Highway, during the peak periods. The results would be forwarded to TfNSW for consideration of the requested line marking.
GB4	483 Denham Court Road Leppington – Request for guard rail extension	<p>Council has received representation from the resident of House No. 485 Denham Court Road, to extend an existing guard rail to the front of their property, in his view, to improve protection against heavy vehicle movements, speeding and possible run off crash into the property.</p> <p>Denham Court Road through Leppington was upgraded by the adjoining land owner with Liverpool and Campbelltown Councils approval. During the road design, required road safety audit, including assessment of road sections where guard rails are required, was carried out.</p> <p>The road safety audit identified that the sections including in front of the subject property has the required clear zone of more than 5m, in accordance with the TfNSW road design guidelines, and a flatter batter grade. Due to these characteristics, a guard rail is not required.</p> <p>However, Council will monitor traffic conditions along the subject road section and if required would reconsider the request to extend the existing guard rail to the front of the property.</p>	<p>The Committee noted that a road safety audit carried out as part of Denham Court Road Upgrade did not identify a need for guard rail in front of the subject property.</p> <p>Council to monitor traffic conditions along the subject road section and if required reconsider the request to extend the existing guard rail to the front of the property.</p> <p>Council would provide a response to the resident.</p>

5	<p>Fifteenth Avenue, Upgrade Austral – Status of the Proposed Upgrade</p>	<p>Council has received a request for information on the status of the planned Fifteenth Avenue Upgrade. The status and responses to the following associated upgrade features are as follows:</p> <p>Upgrade Status – Design and delivery of Fifteenth Avenue upgrade has been handed over to TfNSW. The agency has established a Project Working Group including two Council representatives (from the Transport Planning Unit) to provide input on the required concept and detailed designs, over the next 12 months. Project updates will be provided to Council as the design progresses.</p> <p>TfNSW is currently carrying out additional traffic assessment to include traffic impact of recent and proposed developments along Fifteenth Avenue.</p> <p>Fifteenth Avenue upgrade features:</p> <p>a) Extension of the existing Transit Way (in Hoxton Park Road) - As part of Fifteenth Avenue Upgrade, the T-way in Hoxton Park Road) will be extended to the Western Sydney Airport. The project is being designed to be delivered as two separate projects i.e. Fifteenth Avenue Upgrade East, Cowpasture Road to Devonshire Road and Fifteenth Avenue West, Devonshire Road to a new Eastern Distributor Road to replace Badgerys Creek Road, then via an upgraded Pitt Street or Elizabeth Drive to the Airport.</p> <p>b) Centre or kerb side dedicated bus lanes – Whilst Council's preference is for centre running lanes, TfNSW is reviewing the two options of locating dedicated bus lanes. TfNSW will recommend a preferred option as part of the project business case and concept design.</p> <p>c) Intersection Treatments - The following four intersections are proposed to be upgraded to signalised intersections - Kingsford Smith Avenue/Second Avenue roundabout, Edmondson Avenue/Fifteenth Avenue temporary roundabout and Devonshire Road/Fourth Avenue roundabouts.</p>	<p>The Committee noted the status of the planned Fifteenth Avenue Upgrade and the associated upgrade features, as outlined in the report.</p>
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GB6	Middleton Drive extension to Aviation Road, Middleton Grange – Status of the Proposed Extension	<p>Council has received a request for an update on the planned Middleton Drive extension to Aviation Road, Middleton Grange. The status of the project is as follows:</p> <ul style="list-style-type: none"> • Council has engaged consultants to complete required concept and detailed designs. The underpass requires TfNSW and Westlink M7 Motorway approvals. • Approval of the concept design has been delayed due to interface with M7 Motorway widening. Council is working with TfNSW for the required approval to be issued for the project design to be completed over the next 12 months for construction to follow. Further update will be provided when detailed design is completed. 	The Committee noted the status of the planned Middleton Drive extension to Aviation Road, Middleton Grange, as outlined in the report.
GB7	Elizabeth Drive and Devonshire Road, Kemps Creek - Status of the Proposed Interim Roundabout	<p>Council has received a request for information on the status of the proposed Elizabeth Drive and Devonshire Road interim roundabout. The status of the project is as follows:</p> <ul style="list-style-type: none"> • TfNSW has proposed the interim roundabout to reduce traffic conflict and reduce traffic delays for exit movements from Devonshire Road into Elizabeth Drive, and to comply with a consent condition of the M12 Motorway construction. • TfNSW has advised that the interim roundabout would be installed by early next year. The Agency has been requested to confirm timing for and further update will be provided when installation starts. • Ultimately, as part of Elizabeth Drive upgrade, the intersection will be upgraded to a signalised intersection. 	The Committee noted that TfNSW has advised that the interim roundabout would be installed by early next year. The Agency has been requested to confirm timing for and further update will be provided when installation starts.
GB8	Western Sydney Parklands – Request for Installation of Wildlife Advisory Signs	<p>Council has received a request for the installation of wildlife advisory signs along streets surrounding the Western Sydney Parklands, particularly around Middleton Grange and Parkbridge Estate.</p> <p>The request has reported several kangaroos have been killed or severely injured in recently and appropriate signs may reduce this concern.</p>	The Committee noted that Council would investigate and work with Western Sydney Parklands, to identify locations and install wildlife advisory signs on relevant streets.

GB9	Grimson Crescent, Liverpool – Road Safety Concerns	<p>Council would investigate the request and work with Western Sydney Parklands, to identify locations and install wildlife advisory signs to inform motorists to slow down, and to avoid running into wildlife when driving on the relevant streets.</p> <p>Council has received a representation with a request to investigate traffic speed, inadequate visibility due to parked vehicles on curved road sections, and road safety at the Grimson Crescent and Park Road intersection.</p> <p>In response to the representation, speed classification will be carried out to quantify the level of speeding, and if required, the results will be presented at a future meeting.</p> <p>In addition, parking restrictions within the curved road sections will be investigated and if required delegated approvals would be sought from the police and TfNSW, for the restrictions to be installed.</p> <p>Grimson Crescent and Park Road is an existing “T” intersection with Grimson Crescent as the terminating street. However, it is currently line marking for northbound traffic along Park Road to Give Way to traffic in Grimson Crescent.</p> <p>To demarcate turning movements and clarify priority movement, Council has obtained delegated authority approval, to install central line marking with rumble bars and parking restrictions at the intersection. The intersection treatments will be carried out over the next two months.</p>	<p>The Committee noted that Council will install central line marking with rumble bars and parking restrictions at the intersection over the next two months.</p>
GB10	Camden Valley Way, Leppington at its intersection with Guild Avenue – Installation of Wire Fence in Central Median	<p>TfNSW has advised that wire fencing will be installed in the middle of Camden Valley Way at its intersection with Guild Avenue, Leppington, in mid-October 2023. The fencing is to prevent right turn movements through the central median into Guild Avenue.</p>	<p>The Committee noted that TfNSW will be installing wire fence in the central median along Camden Valley Way at its intersection with Guild Avenue, Leppington, in mid-October 2023, to prevent right turn movements through the central median.</p>
GB11	Conversion of Streets to One-way Streets To Improve Traffic and Parking Arrangement	<p>The Committee discussed a request from the chairperson to investigate streets that could be changed to one-way to improve traffic flow and permit on-street parking, particularly around schools.</p>	<p>The Committee noted that Council will investigate streets that could be changed to one-way streets to</p>

		<p>Possible streets that would be investigated includes:</p> <ul style="list-style-type: none"> • Margaret Dawson Drive, Carnes Hill • Mackellar Street, Casula 	<p>improve traffic and permit on-street parking and submit to a future meeting for further consideration.</p>
GB12	Epsom Road, Chipping Norton - Concerns about Illegal Heavy Vehicle Movements	<p>The Committee discussed an observation from the Chairperson about illegal heavy vehicle movements along Epsom Road, contrary to the applicable load limit sign.</p> <p>The Police was requested to include the street in their patrol and enforcement.</p>	<p>The Committee noted illegal heavy vehicle movements such as along Epsom Road and requested the Police to include the street in their patrol and enforcement.</p>
GB13	Bravo Avenue and Bird Walton Avenue, Middleton Grange – Concerns about On-street Parking	<p>The representative for the Member of Leppington, raised the concern about the impact of on-street parking along sections of Bravo Avenue and Bird Walton Avenue and requested investigation to address the concerns.</p>	<p>The Committee noted that Council would investigate the concerns and consult with local residents to identify whether additional parking restrictions are required, for further action.</p>
GB14	Curlew Street and Mernagh Street, Ashcroft – Request for Information on Road Maintenance	<p>The representative for the Member of Liverpool requested information on when road resurfacing would be carried out on Curlew Street and Mernagh Street.</p>	<p>The Committee noted that Council would request the Operations Directorate to provide information to the Local Member's office on when the resurfacing is scheduled to be carried out.</p>
GB15	Spencer Road, Cecil Hills – Request for Update to Principal of Cecil Hills Public School	<p>The representative for the Member of Liverpool requested information on whether the principal of Cecil Hills Public School has been provided an update on the status on the approved installation of a kerb blister island near its intersection with Leopold Street.</p>	<p>The Committee noted that Council would provide an update to principal of Cecil Hills Public School.</p>



Agenda Attachments

Liverpool Local Traffic Committee Meeting Agenda Attachment Booklet of 20 September 2023

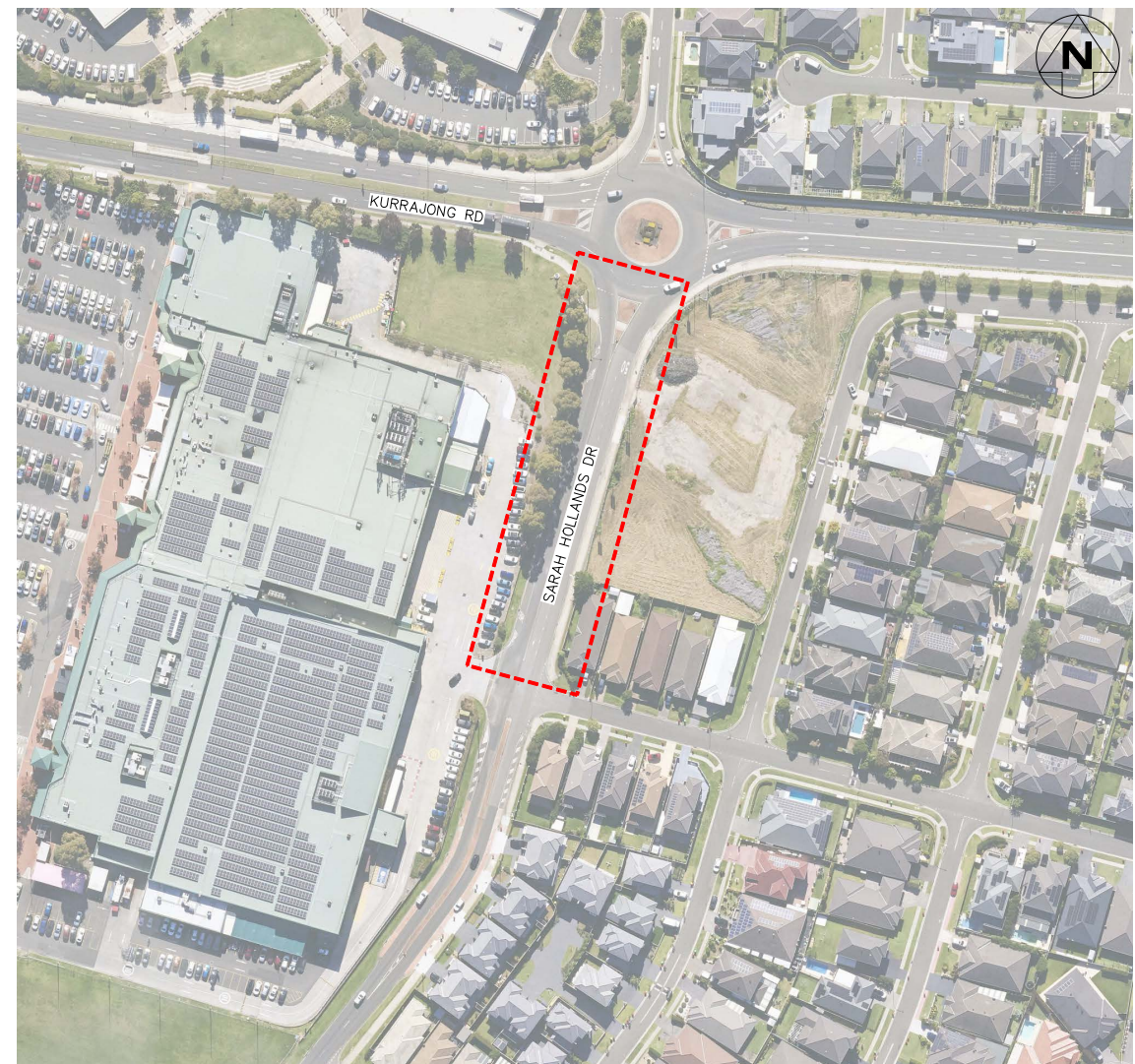
GENERAL NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
2. REDUCED LEVELS AND CHAINAGES ARE IN METRES. SET OUT DIMENSIONS ON THE DRAWING SHALL BE VERIFIED BY THE CONTRACTOR ON SITE.
3. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS
4. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS.
5. WORKMANSHIP AND MATERIALS SHALL CONFORM WITH THE REQUIREMENTS OF THE RELEVANT S.A.A. CODES AND THE SPECIFICATIONS, BY-LAWS AND ORDINANCES OF COUNCIL
6. ALL EXCAVATION, SHORING OF EXCAVATION AND STABILITY OF ADJACENT STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL NEW WORKS TO MAKE SMOOTH JUNCTION WITH EXISTING CONDITIONS.
7. CONTRACTOR IS TO CLEAR SITE BY REMOVING ALL SURPLUS SPOIL, RUBBISH AND DEBRIS ETC.
8. THE CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORKS WITHIN ADJACENT LANDS WITHOUT THE WRITTEN PERMISSION OF THE LAND OWNER.
9. PAVEMENT MARKING & SIGN POSTING TO BE IN ACCORDANCE WITH RMS QA SPECIFICATION R141, R143 AND AUSTRALIAN STANDARD AS1742.2.
10. WHERE EXISTING PAVEMENT MARKING CONFLICTS WITH PROPOSED, IT IS TO BE REMOVED.
11. TRANSITION LINEMARKING TO SUIT EXISTING WHERE REQUIRED.
12. PROVISION FOR TRAFFIC CONTROL DURING CONSTRUCTION TO BE IN ACCORDANCE WITH AS 1742.3.
13. ROAD LIGHTING SHOULD BE REVIEWED IN ACCORDANCE WITH COUNCIL'S PUBLIC DOMAIN LIGHTING POLICY.
14. CONTRACTOR TO CONTACT "DIAL BEFORE YOU DIG" ON TEL: 1100 FOR PLAN INFORMATION ON UNDERGROUND PIPES & CABLES. AT LEAST TWO DAYS PRIOR TO THE COMMENCEMENT OF WORK. USING THE PLANS & ON-SITE LOCATION MARKINGS AS AN INDICATION OF PLANT PRESENCE, HAND DIG TO EXPOSE ALL PLANT WITHIN THE SAFE APPROACH DISTANCES. CONTRACTORS TO BE HELD RESPONSIBLE SHOULD THEY DAMAGE UTILITY PROPERTY.
15. ALL SERVICES AFFECTED BY NEW WORK TO BE ADJUSTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SERVICE AUTHORITY.
16. SERVICES ACROSS ROAD TO BE MARKED AND EXPOSED PRIOR TO ANY CONSTRUCTION WORK. CONTRACTOR TO BE ADVISED BY COUNCIL OF ANY SERVICES AFFECTED BY PROPOSED WORK. CONTRACTOR TO BE RESPONSIBLE FOR THE PROTECTION OF ALL SERVICES AFFECTED BY PROPOSED WORK.

A "DIAL BEFORE YOU DIG" SEARCH ENQUIRY ON 02.05.23, HAS IDENTIFIED THAT THE ASSET OWNERS AND AUTHORITIES TABLED BELOW HAVE CRITICAL INFRASTRUCTURE LOCATED WITHIN THE PROPOSED WORKS AREA. IT SHOULD BE NOTED THAT NOT ALL SERVICES MAY BE SHOWN ON THIS PLAN. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS, CONDUCTING WORKS ON SITE IN ASSOCIATION WITH THIS DESIGN PLAN, TO CONTACT THE RELEVANT ASSET OWNER OR AUTHORITY FOR THE LOCATION OF CRITICAL INFRASTRUCTURE PRIOR TO COMMENCING WORKS.

ASSET OWNER / AUTHORITY	NOTIFICATION OF ASSETS
JEMENA GAS WEST	ASSETS WITHIN WORK AREA
NBN Co, NswAct	ASSETS WITHIN WORK AREA
OPTICOMM LTD	ASSETS WITHIN WORK AREA
LIVERPOOL CITY COUNCIL	ASSETS WITHIN WORK AREA
SYDNEY WATER	ASSETS WITHIN WORK AREA
TELSTRA	ASSETS WITHIN WORK AREA
ENDEAVOUR ENERGY	ASSETS WITHIN WORK AREA
TPG TELECOM	ASSETS WITHIN WORK AREA

1. EXCAVATION SHALL BE CARRIED OUT TO THE DEPTHS & DIMENSIONS SHOWN OR IMPLIED ON THE PLANS AND/OR THE DOCUMENTS, OR TO SUCH GREATER DEPTHS & DIMENSIONS, AS WILL ENSURE SOUND, PERMANENT FOUNDATIONS. ALL EXCAVATIONS SHALL BE APPROVED BY THE SUPERINTENDENT BEFORE ANY MATERIALS OR STRUCTURES ARE PLACED.
2. REMOVAL OF TOPSOIL: TOPSOIL SHALL BE STRIPPED FROM WITHIN THE AREA OF WORKS INCLUSIVE OF BATTERS & SHALL BE DISPOSED OR STOCKPILES AS DIRECTED BY THE SUPERINTENDENT. THE THICKNESS OF THE TOPSOIL STRIPPING SHALL NOT BE LESS THAN 100mm.
3. WHERE FILLING IS REQUIRED, MATERIAL IS TO BE SELECTED IN DISCUSSION WITH AND TO THE SATISFACTION OF THE SUPERINTENDENT. ALL IMPORTED FILL MATERIAL SHALL BE VIRGIN EXCAVATED NATURAL MATERIAL (VENM) FREE FROM CHEMICAL OR OTHER CONTAMINATION. A CONTAMINATION REPORT ON THE PROPOSED IMPORTED FILL MATERIAL, FROM A NATA REGISTERED LABORATORY, MAY BE REQUIRED BY COUNCIL PRIOR TO PLACEMENT OF FILL.
4. COMPACTION AROUND STRUCTURES, UNDER APRONS ETC: UNDISTURBED SUBGRADE OR APPROVED MATERIAL TO BE COMPACTED TO 98% OF THE STANDARD MAXIMUM DRY DENSITY & IS TO BE WITHIN -1 TO +2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD COMPACTION TEST (A.S 1289.5.1.1).
5. IN DISTURBED AREAS PROVIDE PENNISIETUM CLANDESTINUM (KIKUYU) TURF ON 50 THICK TOPSOIL, UNLESS NOTED OTHERWISE.
6. EROSION & SEDIMENTATION CONTROLS ARE TO BE IMPLEMENTED IN ACCORDANCE WITH EPA REQUIREMENTS.
7. EXCAVATION WITHIN THE DRILLINE AREA OF EXISTING TREES IS TO BE UNDERTAKEN WITH CARE. NO ROOTS OR LIMBS ARE TO BE CUT WITHOUT THE APPROVAL OF COUNCIL. TRANSFERRED FROM AUTHORITIES PLANS.




WARNING
Many services present in vicinity. Exercise extreme caution during excavation.

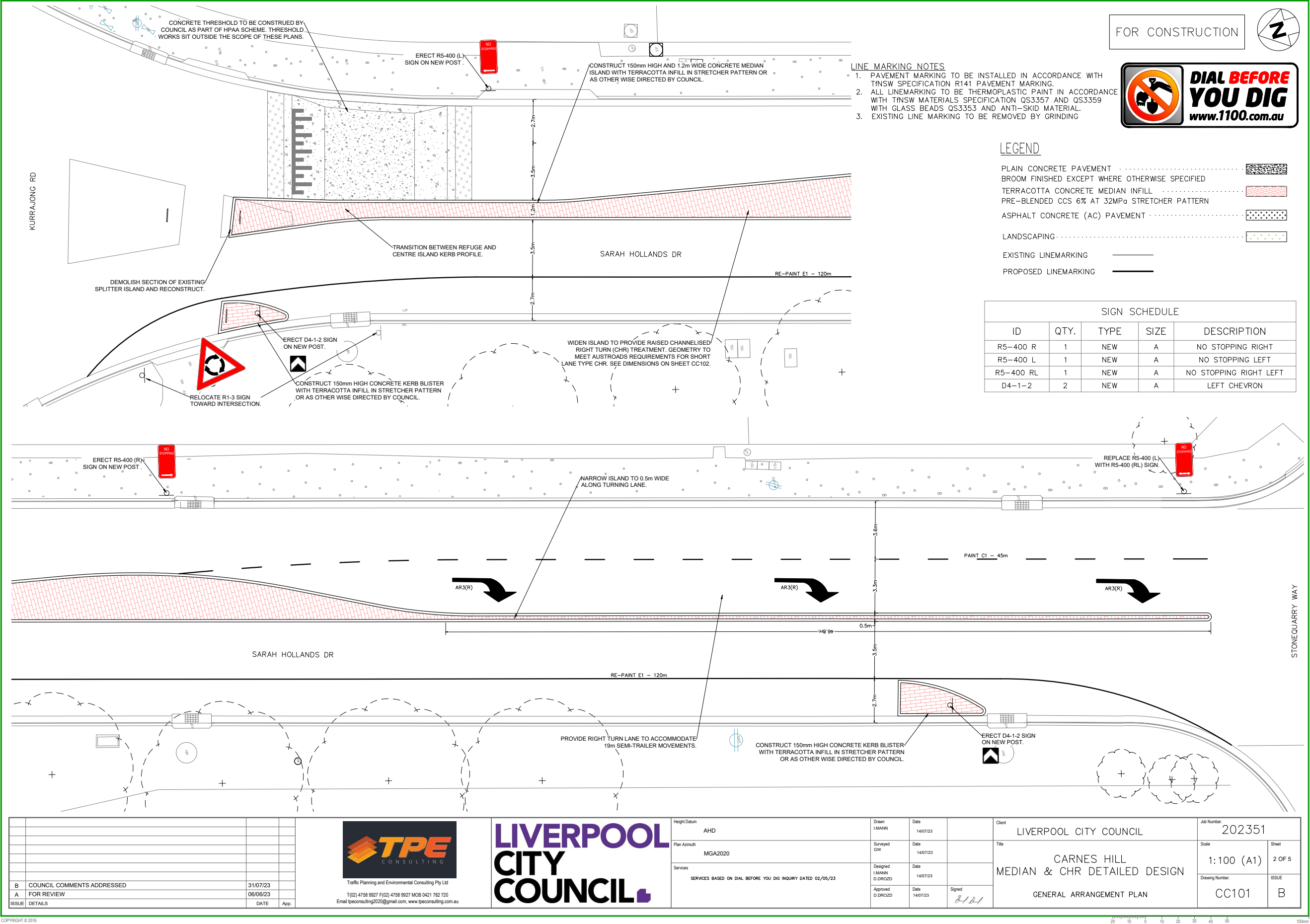
CALL DIAL BEFORE YOU DIG
TO OBTAIN UPDATED SERVICE
LOCATIONS PRIOR TO
COMMENCEMENT
SERVICES SHOWN ARE COMPILED FROM PLANS DATED 05/06/2023
DIAL 1100 BEFORE YOU DIG



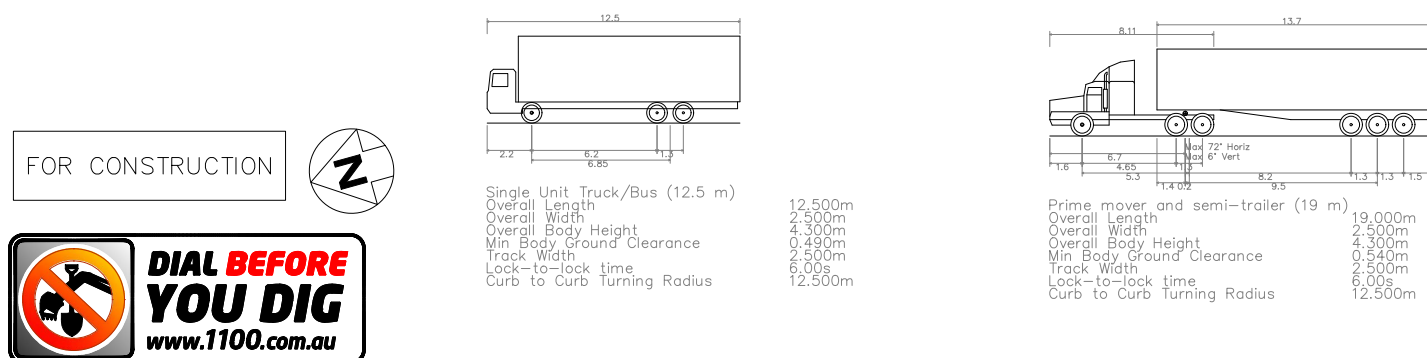
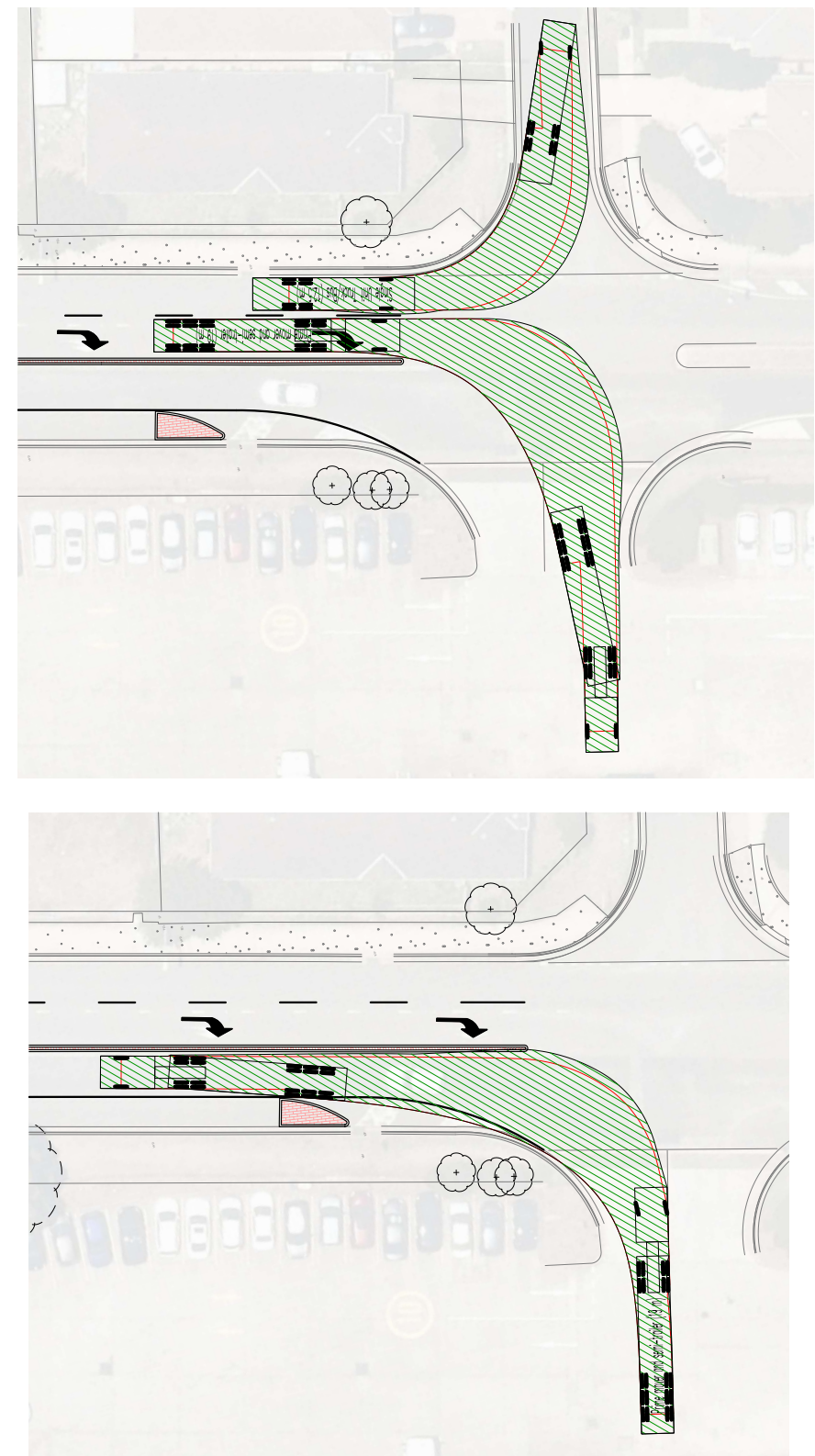
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A	FOR REVIEW	06/06/23	
ISSUE	DETAILS.	DATE	Appr



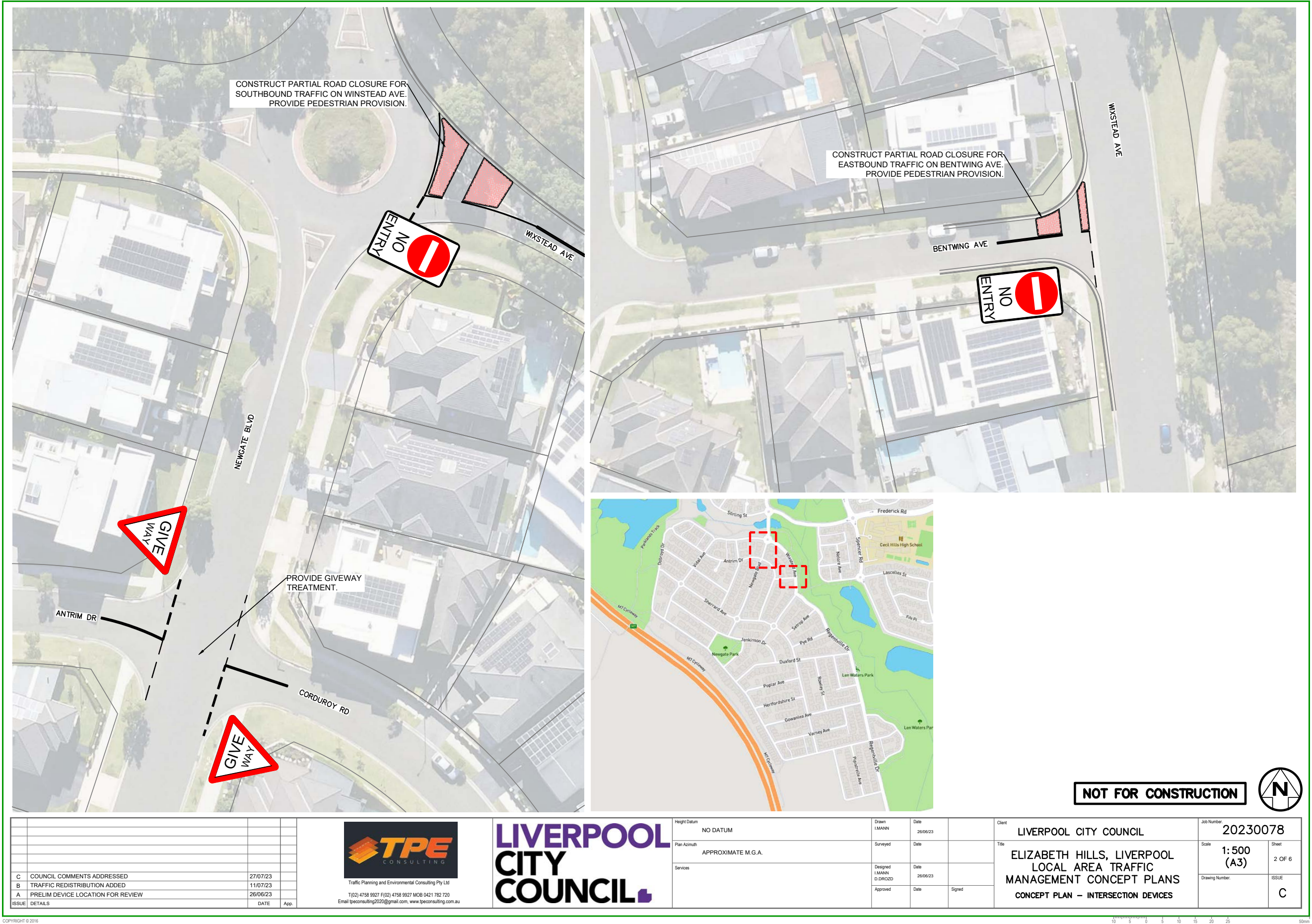
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Plan Azimuth	MGA2020	Surveyed GW	Date 14/07/23			Title CARNES HILL MEDIAN & CHR DETAILED DESIGN	Scale	Sheet 1 OF 5
Services SERVICES BASED ON DIAL BEFORE YOU DIG INQUIRY DATED 02/05/23		Designed I.MANN D.SROCDZ	Date 14/07/23				Signed 	Drawing Number: CC000



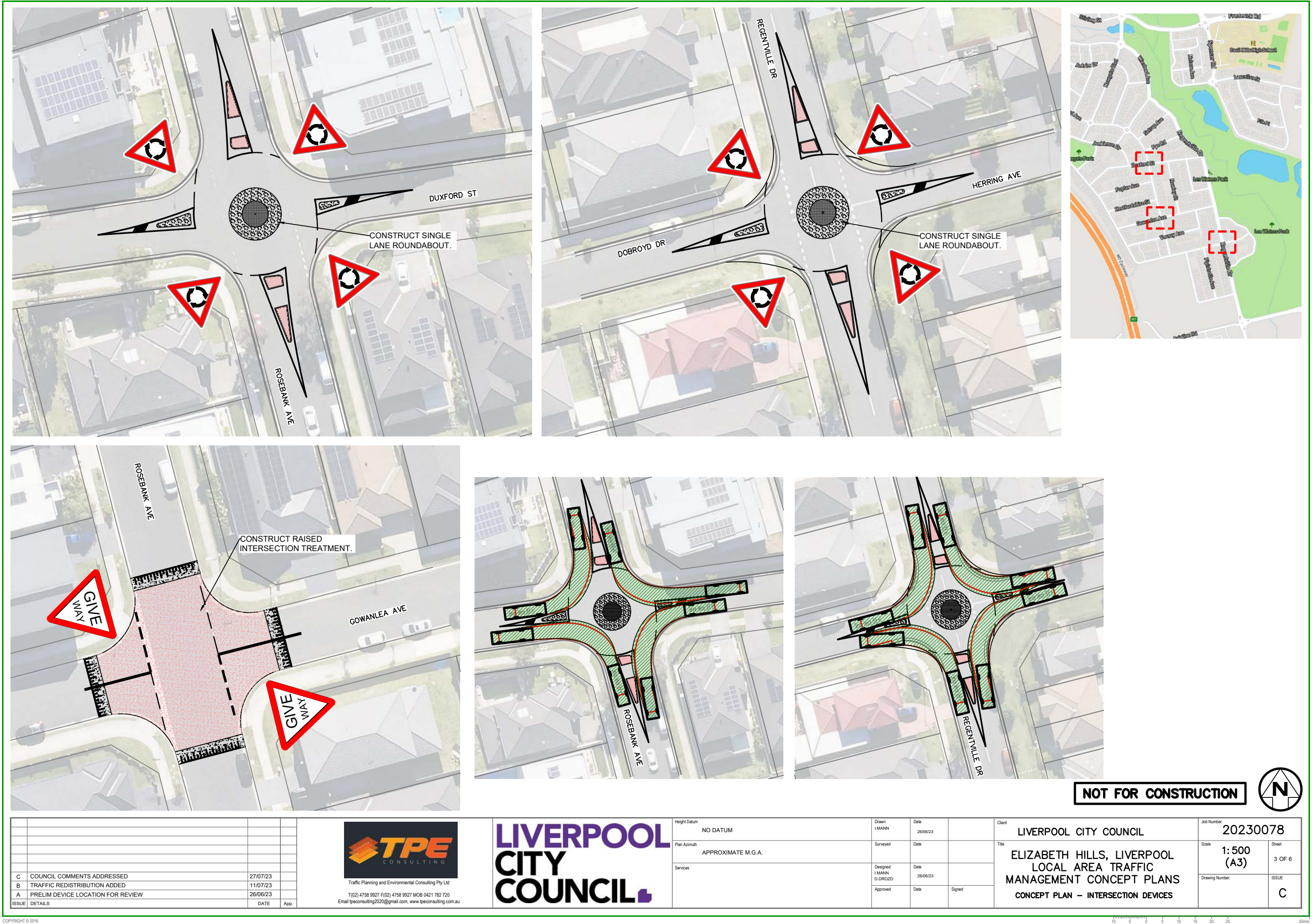


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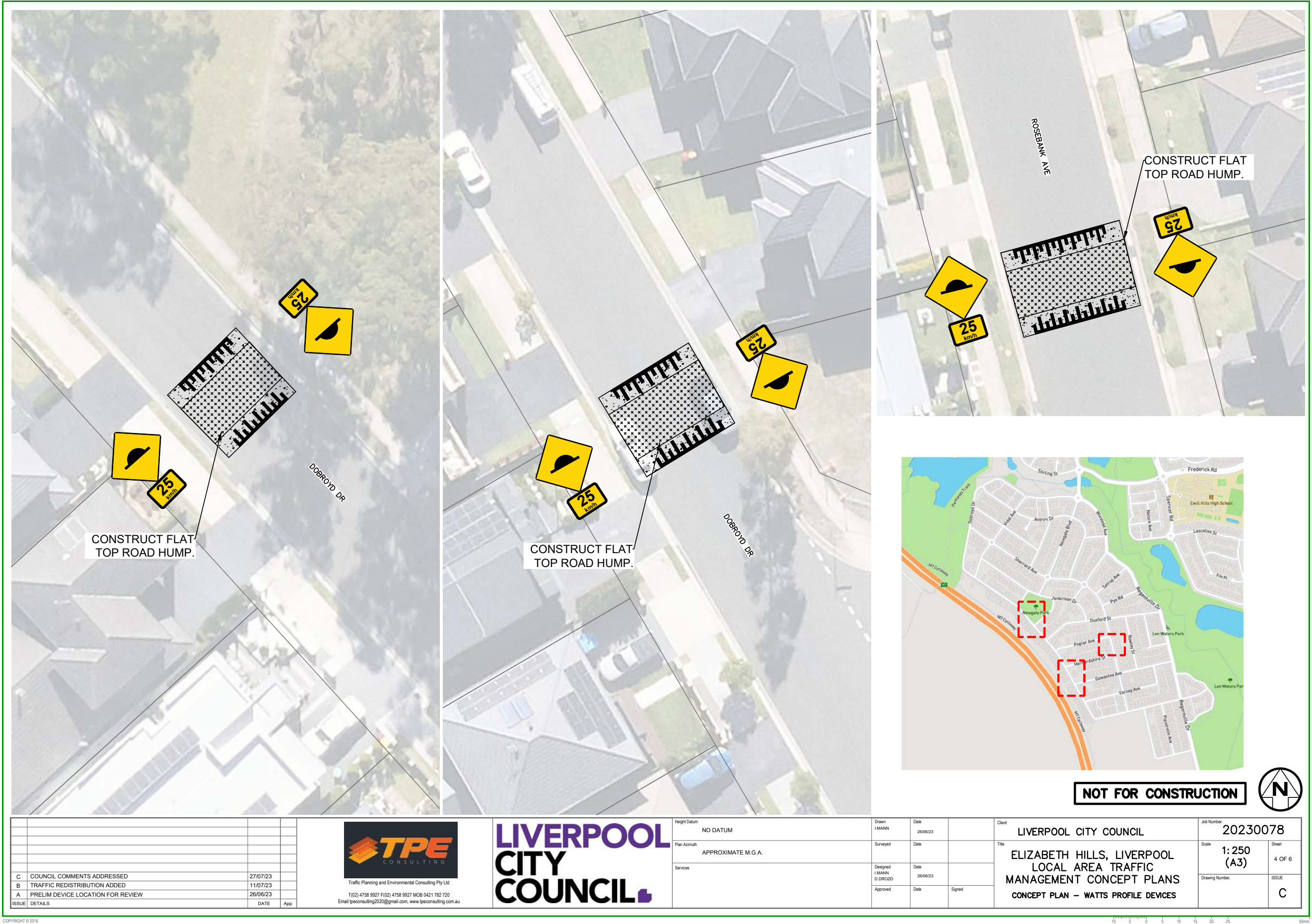


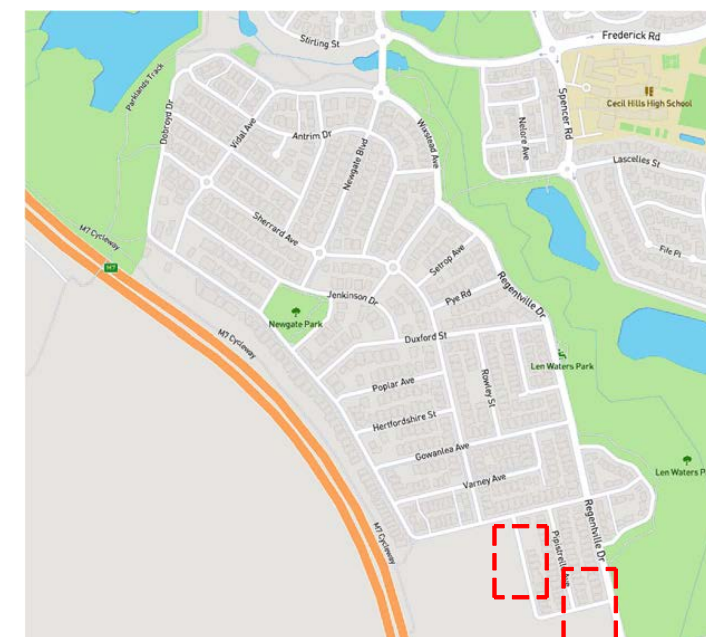
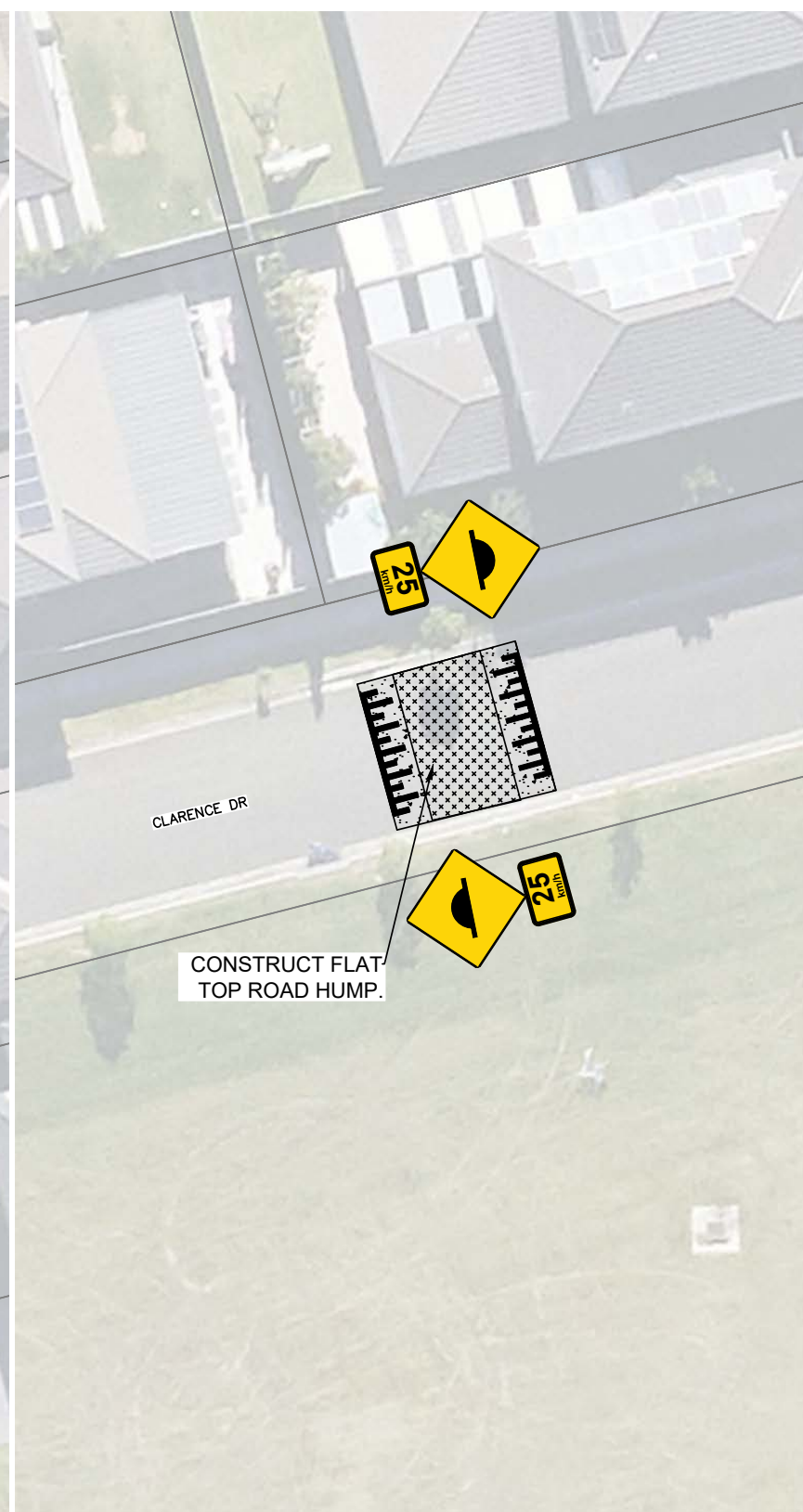


ATTACHMENT 2.3



ATTACHMENT 2.4





NOT FOR CONSTRUCTION



C	COUNCIL COMMENTS ADDRESSED	27/07/23	
B	TRAFFIC REDISTRIBUTION ADDED	11/07/23	
A	PRELIM DEVICE LOCATION FOR REVIEW	26/06/23	
ISSUE	DETAILS	DATE	App.

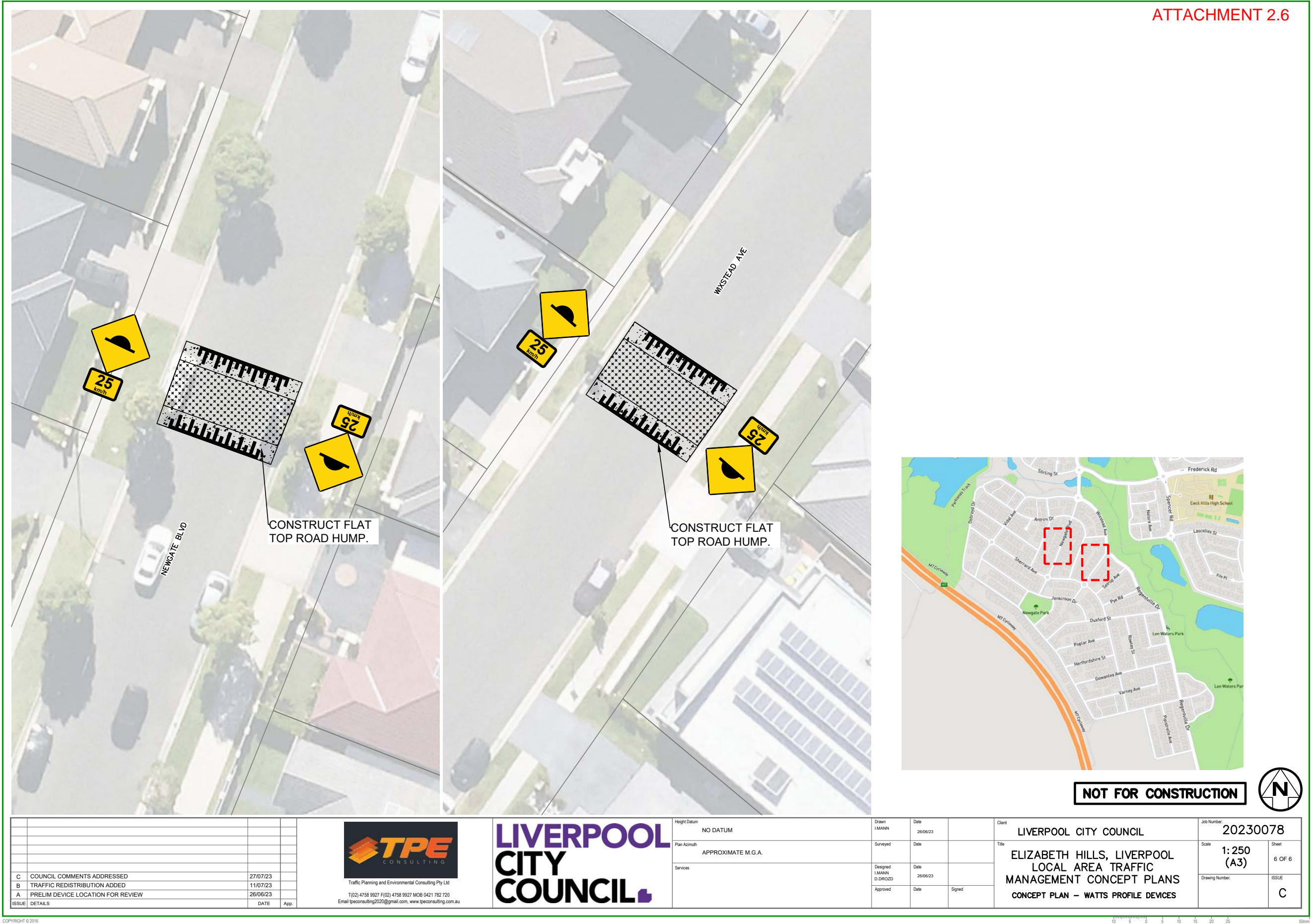


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T(02) 4758 9927 F(02) 4758 9927 MOB 0421 782 720
Email tpeconsulting2020@gmail.com, www.tpeconsulting.com.au

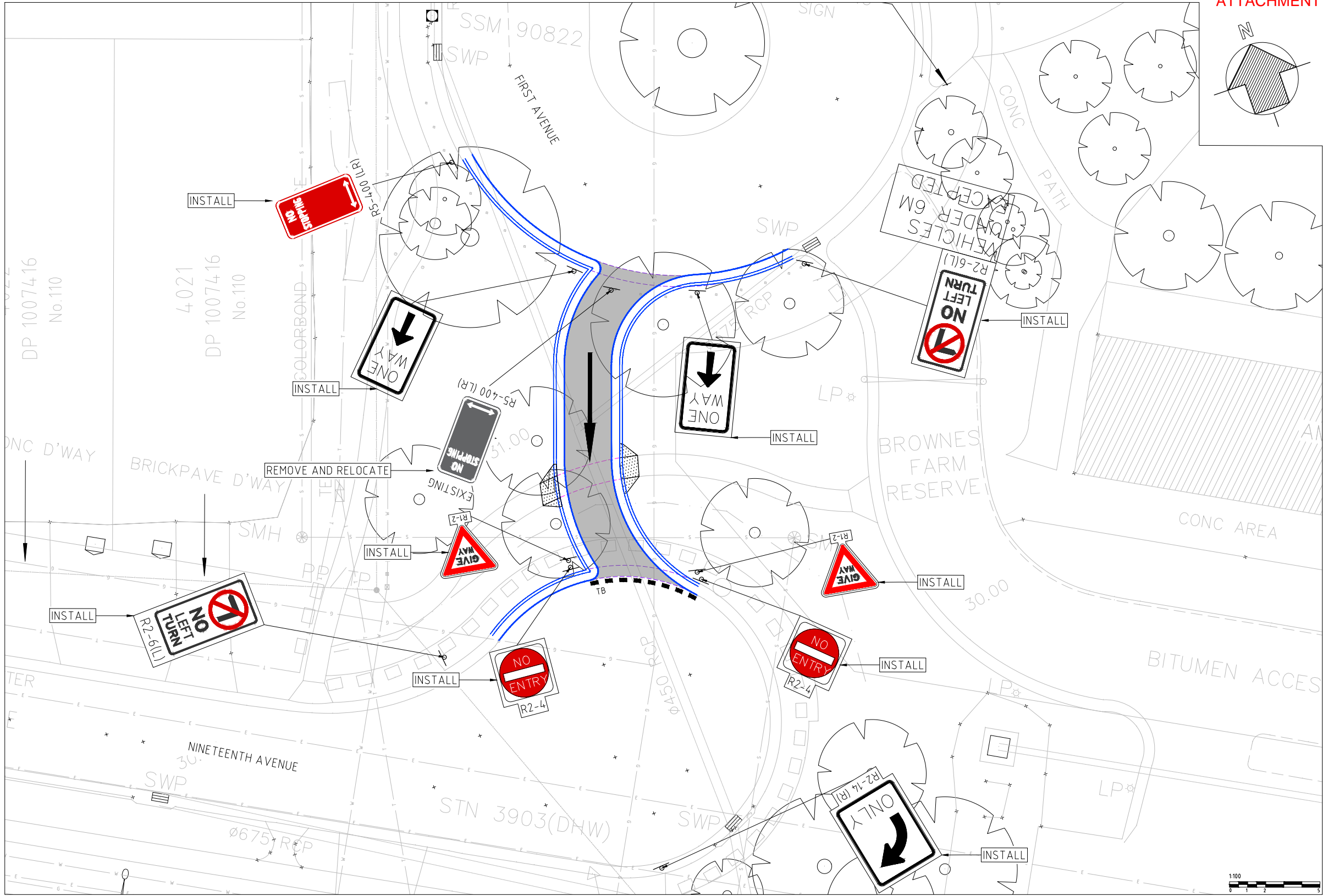
**LIVERPOOL
CITY
COUNCIL**

Height Datum NO DATUM			Drawn J.MANN		Date 26/06/23		Client LIVERPOOL CITY COUNCIL		Job Number 20230078			
Plan Azimuth APPROXIMATE M.G.A.			Surveyed		Date		Title ELIZABETH HILLS, LIVERPOOL LOCAL AREA TRAFFIC MANAGEMENT CONCEPT PLANS CONCEPT PLAN – WATTS PROFILE DEVICES		Scale 1:250 (A3)		Sheet 5 OF 6	
Services			Designed J.MANN D.DROZDZ		Date 26/06/23				Drawing Number:		ISSUE C	
			Approved		Date		Signed					

ATTACHMENT 2.6



ATTACHMENT 3



DATE OF COMPLETION				COORDINATOR INVESTIGATIONS & DESIGN				LIVERPOOL CITY COUNCIL INVESTIGATIONS & DESIGN				SURVEYED D.M./G.B.				DATING				DRAWING TITLE				JOB No				DWG. No			
DATE OF RELEASE				MANAGER-INFRASTRUCTURE PLANNING				3 HOXTON PARK ROAD, LIVERPOOL, NSW 2170				DATE 08/16				A.H.D./M.G.A.				FIRST AND NINETEENTH AVENUE, HOXTON PARK				DS2023_001				201			
DATE OF ACCEPTANCE				PROJECT ENGINEER				Ph 1300 36 2170 Fax (02) 9821 9333				DESIGNED R.L.				CHECKED B.P.				CONSTRUCTION OF ONE-WAY ROAD CONNECTING FIRST AND NINETEENTH AVENUE				SCALES				ISSUE No			
DATE OF RELEASE				MANAGER - INFRASTRUCTURE DELIVERY								DATE DATE				DATE DATE				SIGNAGE AND LINEMARKING PLAN				1:100 @ A1				A			
DATE				TRAFFIC COMMITTEE								DRAWN				CHECKED												CONTRACT No			
REASON FOR ISSUE												SIGNED				DATE															
												APPROV				DATE															
												OWNER																			

TRAFFIC COMMITTEE

ATTACHMENT 5.1



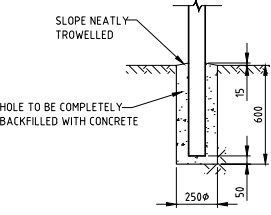
FOR CONTINUATION REFER TO SHEET 111

SURVEY LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EX TREE
- Ex SW EXISTING STORMWATER DRAINAGE LINE
- Ex S EXISTING SEWER LINE
- Ex W EXISTING WATER MAIN
- Ex G EXISTING GAS LINE
- Ex T EXISTING TELECOMMUNICATIONS LINE
- Ex E EXISTING ELECTRICAL LINE
- EXISTING UNKNOWN SERVICE

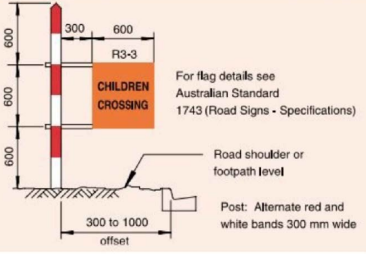
LINEMARKING LEGEND

- NOTE
LINEMARKING TO BE IN ACCORDANCE WITH AS1742.2 AND THE RELEVANT LOCAL OR STATE AUTHORITY GUIDELINES.
- BB 0.1m wide DIVIDING BARRIER LINES (TWO WAY)
 - ES 0.1m wide EDGE LINE
 - C1 0.15m wide 3m gap CONTINUITY LINE
 - TB 0.3m wide GIVE WAY
 - B3 0.08m wide DISABLED PARKING BAY BARRIER LINES (YELLOW)



SIGN POST HOLE DETAIL

N.T.S.



POST AND FLAG DETAIL

N.T.S.

WAYFINDING SIGNAGE NOTES

- REFER TO 'URBANITE' DRAWINGS FOR SIGNAGE DETAILS

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

EXISTING KERBSIDE PARKING - "NO PARKING" DURING SCHOOL PICK UP/DROP OFF HOURS

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE. THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

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01	ISSUE FOR CONSTRUCTION	30.06.23	HM	-

Rev	Description	Date	By	App

Rev	Description	Date	By	App



Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
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F: +61 2 9319 7518
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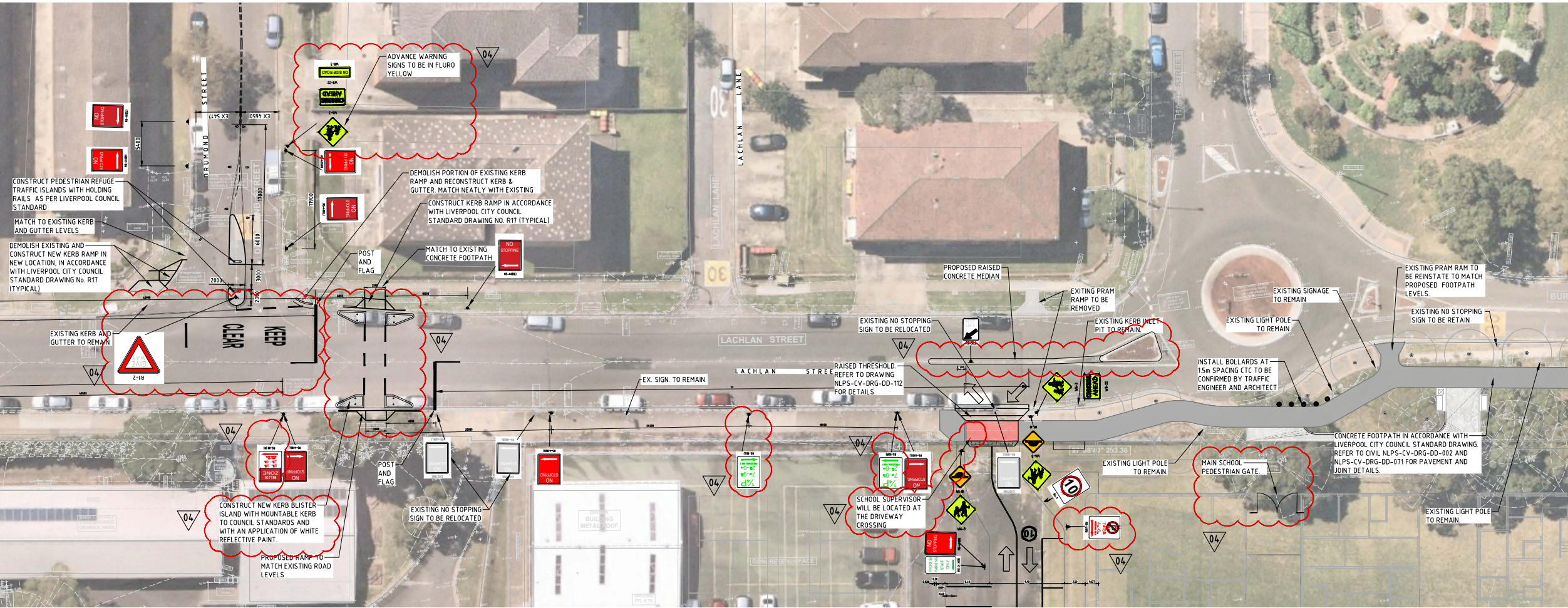
Project Name
**LIVERPOOL EDUCATION PRECINCT
NEW PRIMARY SCHOOL
FORBES STREET, LIVERPOOL NSW 2170**

Drawing Title
PUBLIC DOMAIN PLAN

FOR CONSTRUCTION			
Designed	TD	Approved	Date
Drawn	HM		
Scale	1:250	Project Ref	Drawing No
Date	JUN 2023		
Sheet	A1		Rev

04

FOR CONTINUATION REFER TO SHEET 110



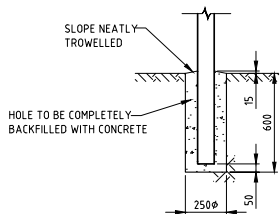
SURVEY LEGEND

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EX TREE
- Ex SW EXISTING STORMWATER DRAINAGE LINE
- Ex S EXISTING SEWER LINE
- Ex W EXISTING WATER MAIN
- Ex G EXISTING GAS LINE
- Ex T EXISTING TELECOMMUNICATIONS LINE
- Ex E EXISTING ELECTRICAL LINE
- EXISTING UNKNOWN SERVICE

LINEMARKING LEGEND

NOTE
LINEMARKING TO BE IN ACCORDANCE WITH AS1742.2 AND THE RELEVANT LOCAL OR STATE AUTHORITY GUIDELINES.

- 0.1m wide B8 DIVIDING BARRIER LINES (TWO WAY)
- 0.15m wide E5 EDGE LINE
- 0.15m wide 3m gap C1 1m line CONTINUITY LINE
- 0.3m wide TB GIVE WAY
- 0.08m wide B3 DISABLED PARKING BAY BARRIER LINES (YELLOW)

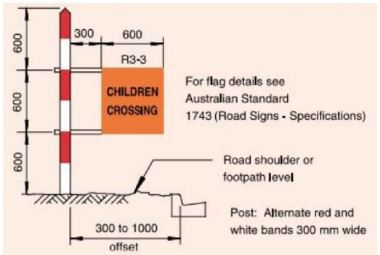


SIGN POST HOLE DETAIL

N.T.S.

WAYFINDING SIGNAGE NOTES

- REFER TO 'URBANITE' DRAWINGS FOR SIGNAGE DETAILS



POST AND FLAG DETAIL

N.T.S.

WARNING

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WARNING

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EXISTING KERBSIDE PARKING - "NO PARKING" DURING SCHOOL PICK UP/DROP OFF HOURS

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE. THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

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Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
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F +61 2 9519 7518
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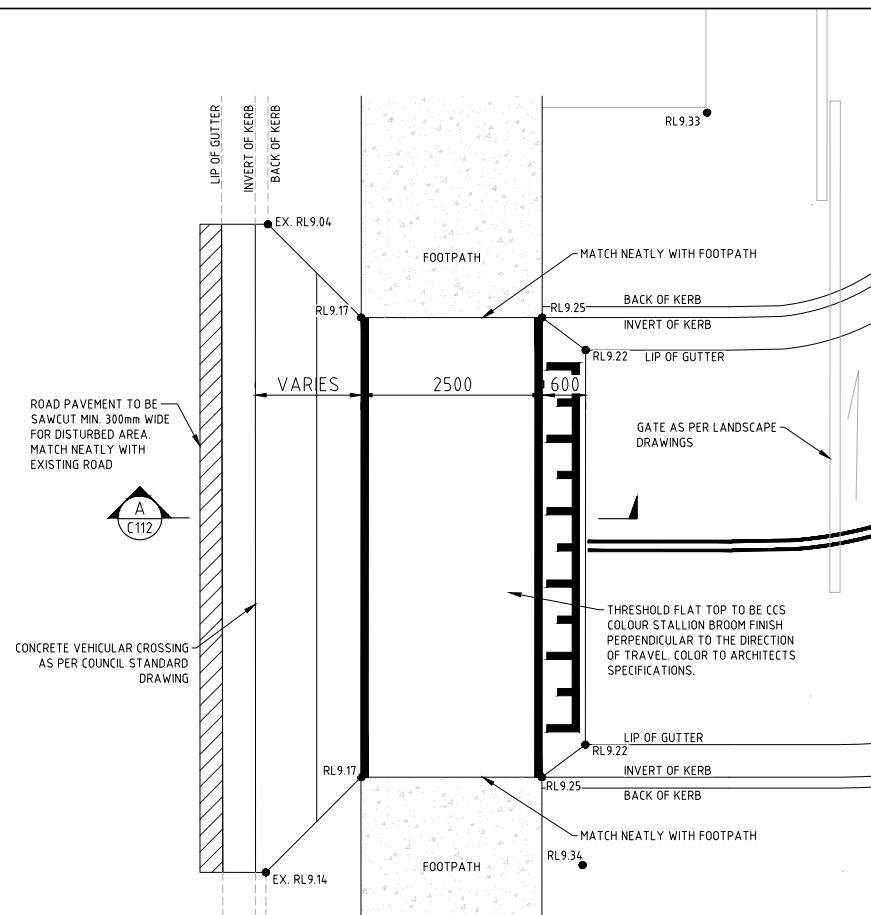
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Drawing Title	PUBLIC DOMAIN PLAN

FOR CONSTRUCTION			
Designed	TD	Approved	Date
Drawn	HM		
Scale	1:250	Project Ref	Drawing No
Date	JUN 2023		Rev
Sheet	A1	NLPS-CV-DRG-DD-111	04

ATTACHMENT 5.3

NOTES

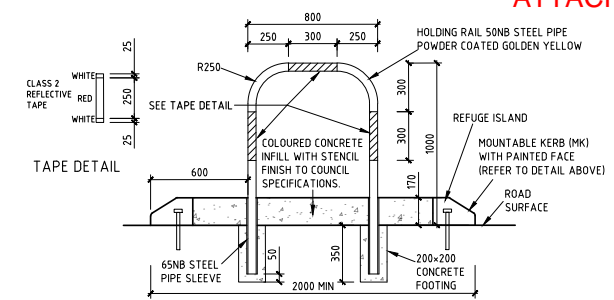
1. ALL PAVEMENT MARKING TO BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE REGULATORY SIGNS MANUAL, AS1742.2 AND AS2890.1:2004
2. FACE OF KERB TO BE PAINTED WITH RETRO - REFLECTIVE WHITE PAINT
3. THRESHOLD FLAT TOP CONCRETE TO BE CCS COLOUR STALLION BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAVEL
4. ALL DESIGN TO IN ACCORDANCE WITH LIVERPOOL CITY COUNCIL.
5. REFER TO DESIGN DRAWINGS FOR THRESHOLD DIMENSIONS, TRAFFIC SIGNS & LINE MARKING DETAILS.
6. LINE MARKING IN ACCORDANCE WITH AS1742.13 (2009) & RMS DELINEATION GUIDELINES .
7. REMOVE ALL REDUNDANT PAVEMENT MARKING AS REQUIRED. REMOVE EXISTING LINEMARKING BY HIGH PRESSURE OR GRIND PLUS BLACKOUT IF REQUIRED.
8. ALL SIGN POSTS TO BE MINIMUM 2.5M HIGH.
9. 100 X 100 X 25mm (UNIT SIZE) STAMPED CONCRETE IN CCS COLOUR STALLION FINISH IS TO BE USED FOR THE PROPOSED PEDESTRIAN REFUGE ISLAND, KERB BLISTERS, MEDIANS AND VEHICULAR CROSSING.



PLAN VIEW

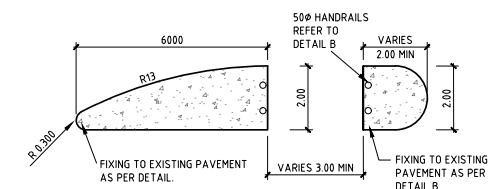
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ALL DIMENSION ARE IN MILLIMETRES UNLESS NOTED OTHERWISE



PEDESTRIAN REFUGE DETAIL B

SCALE: N.T.S.

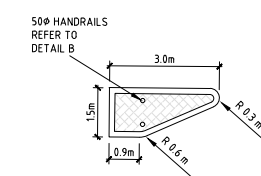
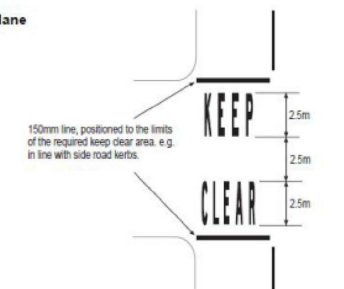


TYPICAL PEDESTRIAN REFUGE ISLAND DETAIL

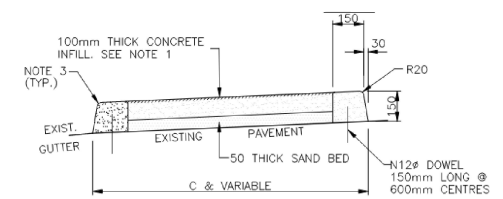
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KEEP CLEAR

Single lane

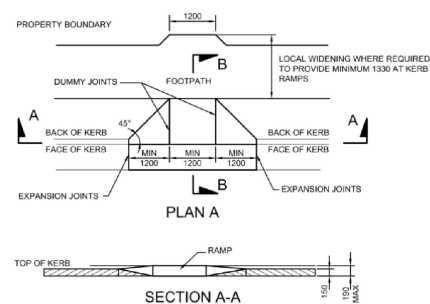
KERB BLISTER

SCALE N.T.S.



KERB BLISTER DETAIL

SCALE N.T.S.



KERB RAMPS

(EXTRACT FROM SD-R07. REFER TO DRAWING
NLPS-CV-DRG-050 FOR DETAILS)

SECTION A

SCALE: NTS

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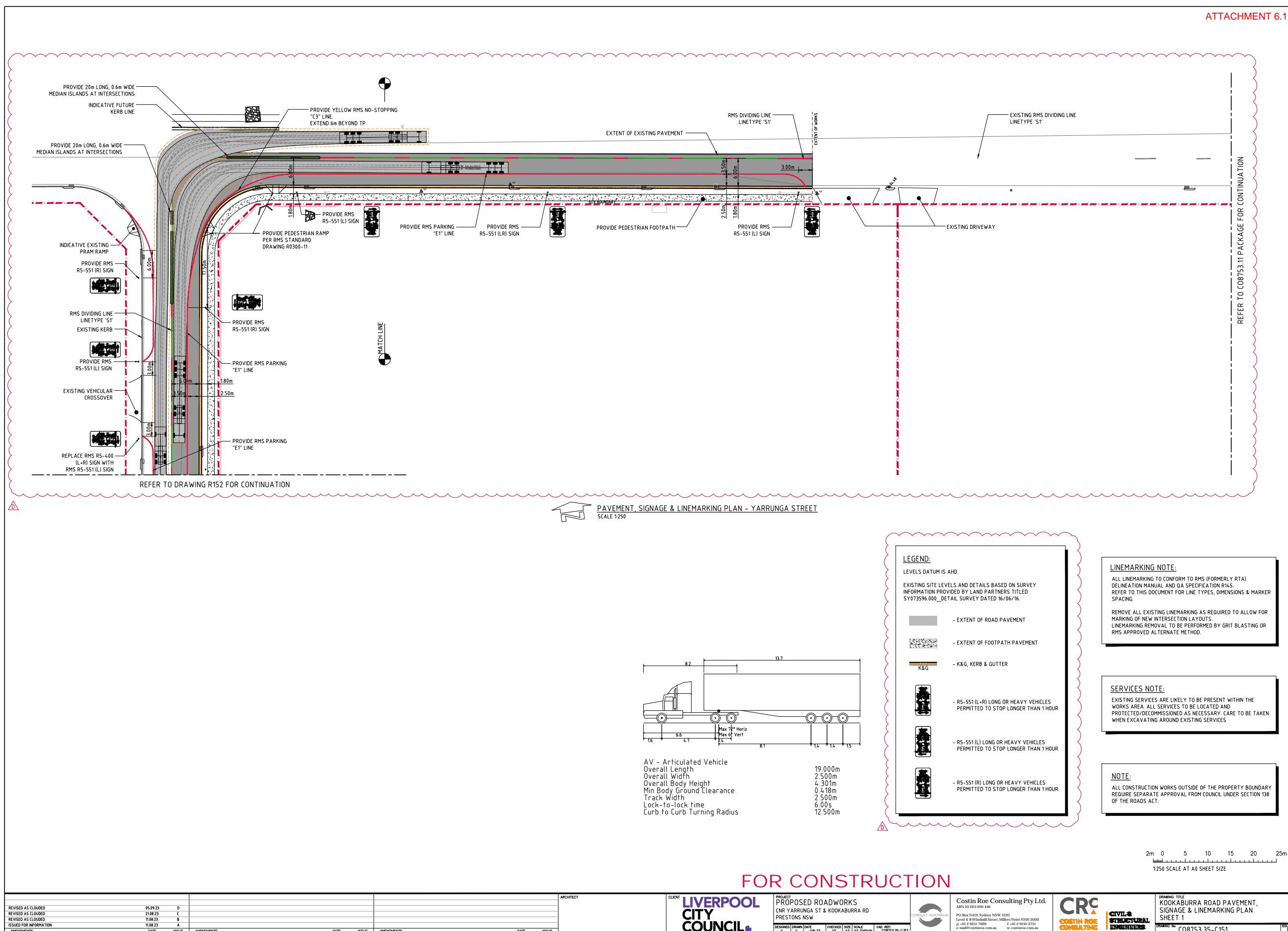


Level 4, 66 Clarence Street
Sydney NSW 2000
Australia
T: +61 2 9699 3088
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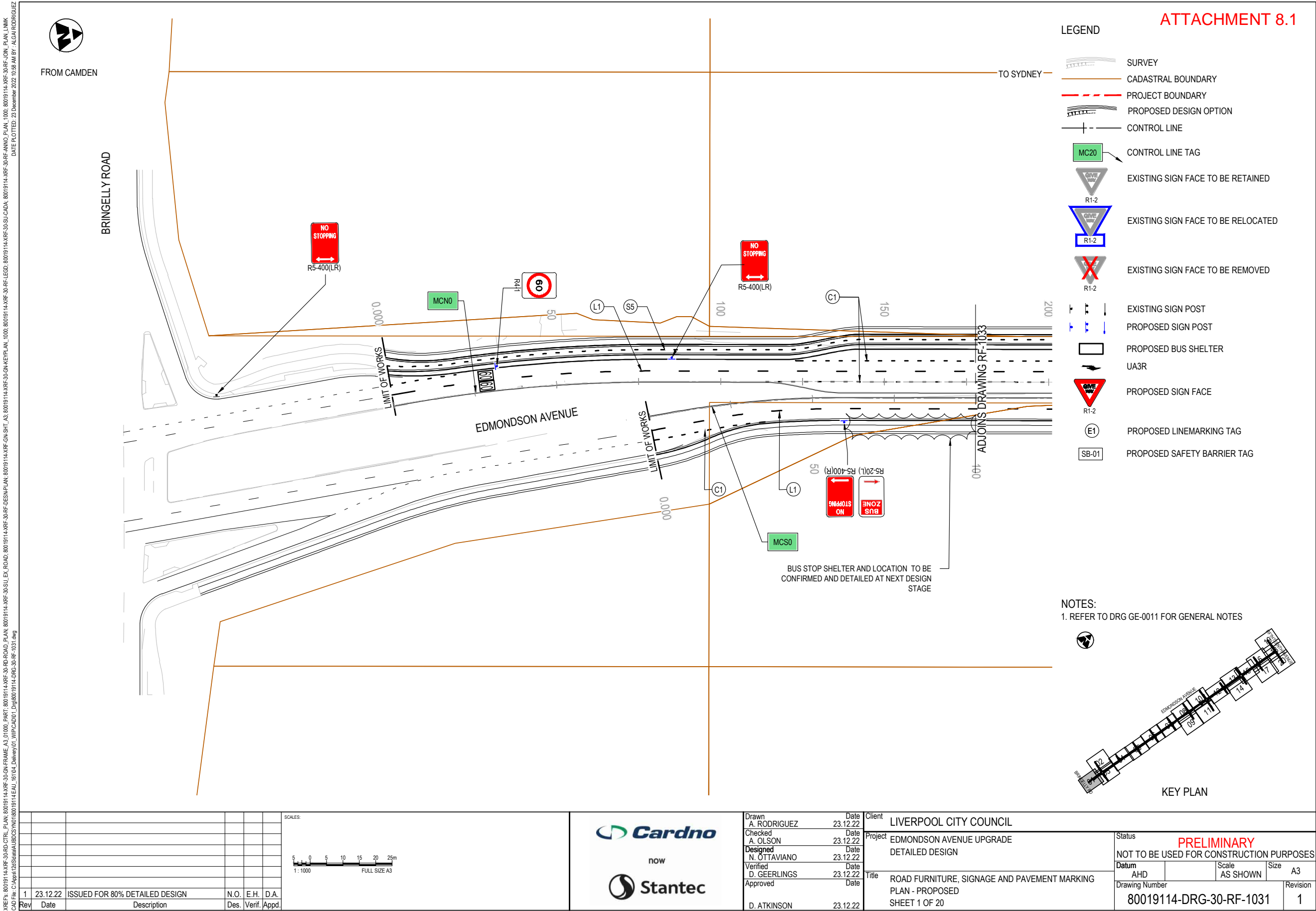
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Drawing Title	PUBLIC DOMAIN - DETAILS

FOR CONSTRUCTION

Designed	TD	Approved	Date	North
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Date	JUN. 2023	Project Ref	Drawing No	Rev
Sheet	A1	NLPS-CV-DRG-DD-112		04

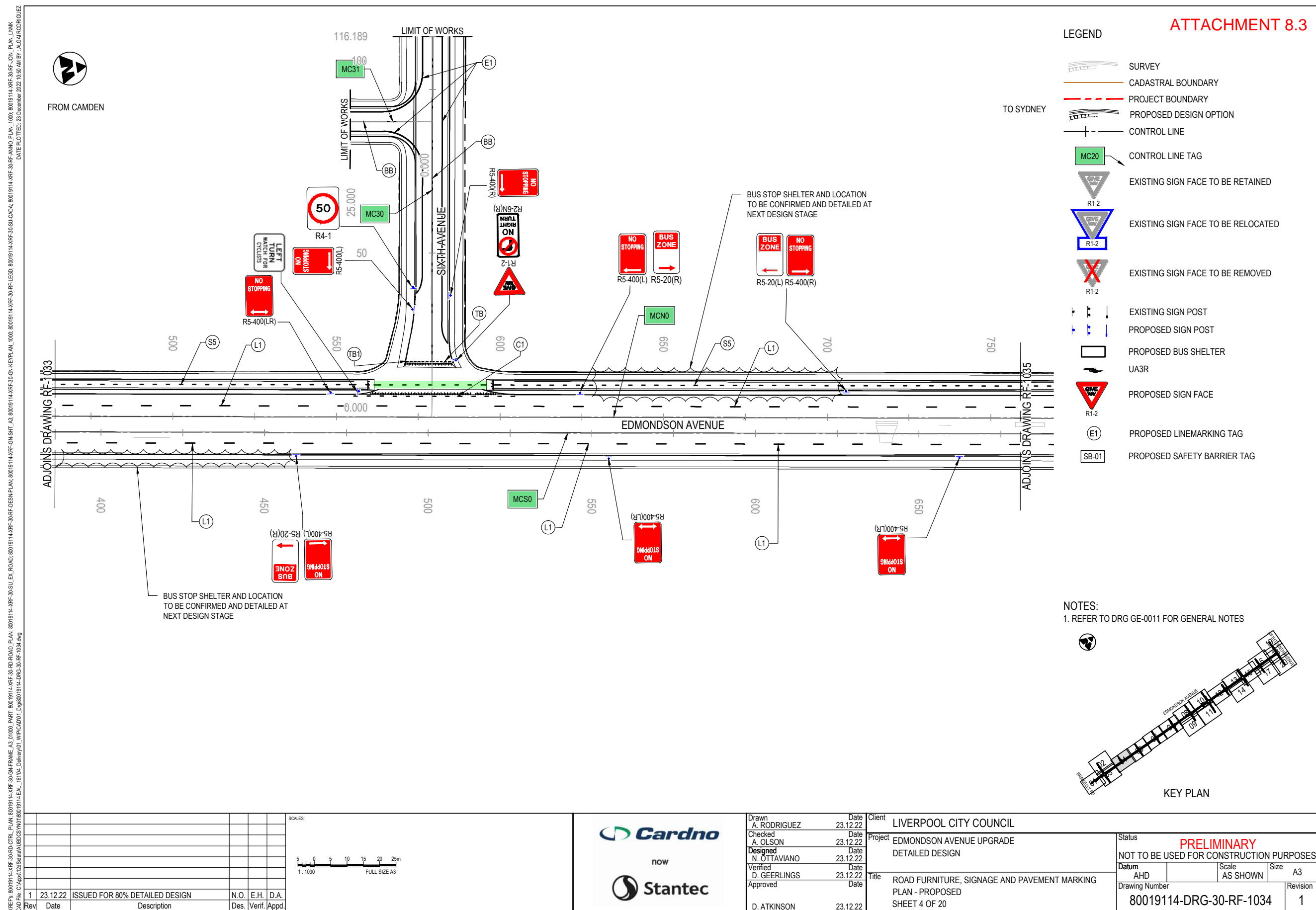


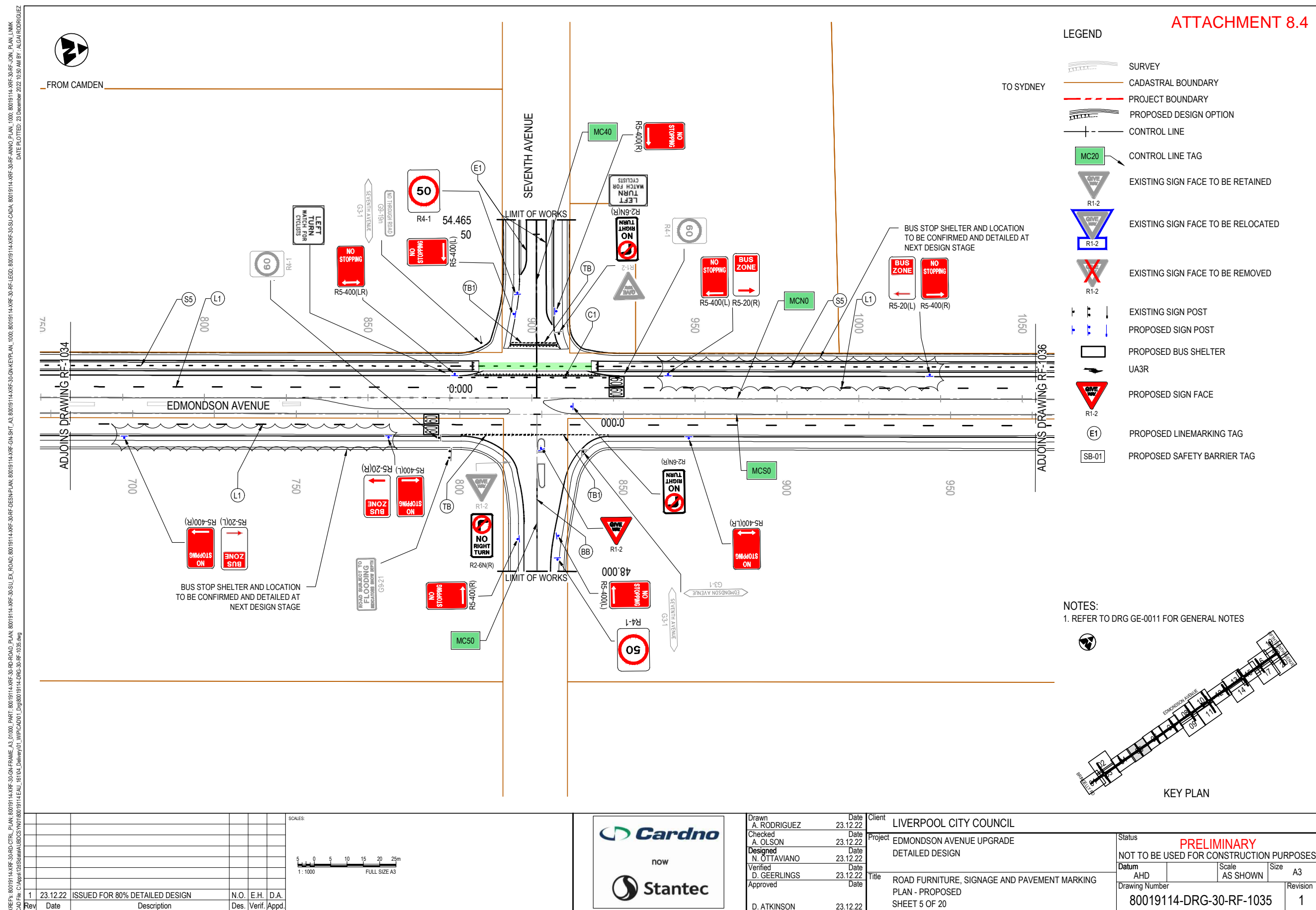




<div>1:1000</div> <div>FULL SIZE A3</div>				<div><div><div><div><div></div><div></div></div><div>Cardno</div></div><div>now</div><div><div><div></div><div></div></div><div>Stantec</div></div></div></div> <div><div><div>Drawn</div><div>A. RODRIGUEZ</div><div>Date</div><div>23.12.22</div></div><div><div>Checked</div><div>A. OLSON</div><div>Date</div><div>23.12.22</div></div><div><div>Designed</div><div>N. OTTAVIANO</div><div>Date</div><div>23.12.22</div></div><div><div>Verified</div><div>D. GEERLINGS</div><div>Date</div><div>23.12.22</div></div><div><div>Approved</div><div>D. ATKINSON</div><div>Date</div><div>23.12.22</div></div></div> <div><div>Client</div><div>LIVERPOOL CITY COUNCIL</div></div> <div><div>Project</div><div>EDMONDSON AVENUE UPGRADE DETAILED DESIGN</div></div> <div><div>Title</div><div>ROAD FURNITURE, SIGNAGE AND PAVEMENT MARKING PLAN - PROPOSED SHEET 3 OF 20</div></div> <div><div>Status</div><div>PRELIMINARY</div></div> <div><div>Datum</div><div>AHD</div><div>Scale</div><div>AS SHOWN</div><div>Size</div><div>A3</div></div> <div><div>Drawing Number</div><div>80019114-DRG-30-RF-1033</div></div> <div><div>Revision</div><div>1</div></div>
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Rev	Date	Description	N.O.	E.H.	D.A.
1	23.12.22	ISSUED FOR 80% DETAILED DESIGN			



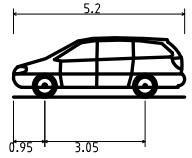




PROJECT
AL-FAISAL COLLEGE
ROUNDAABOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179

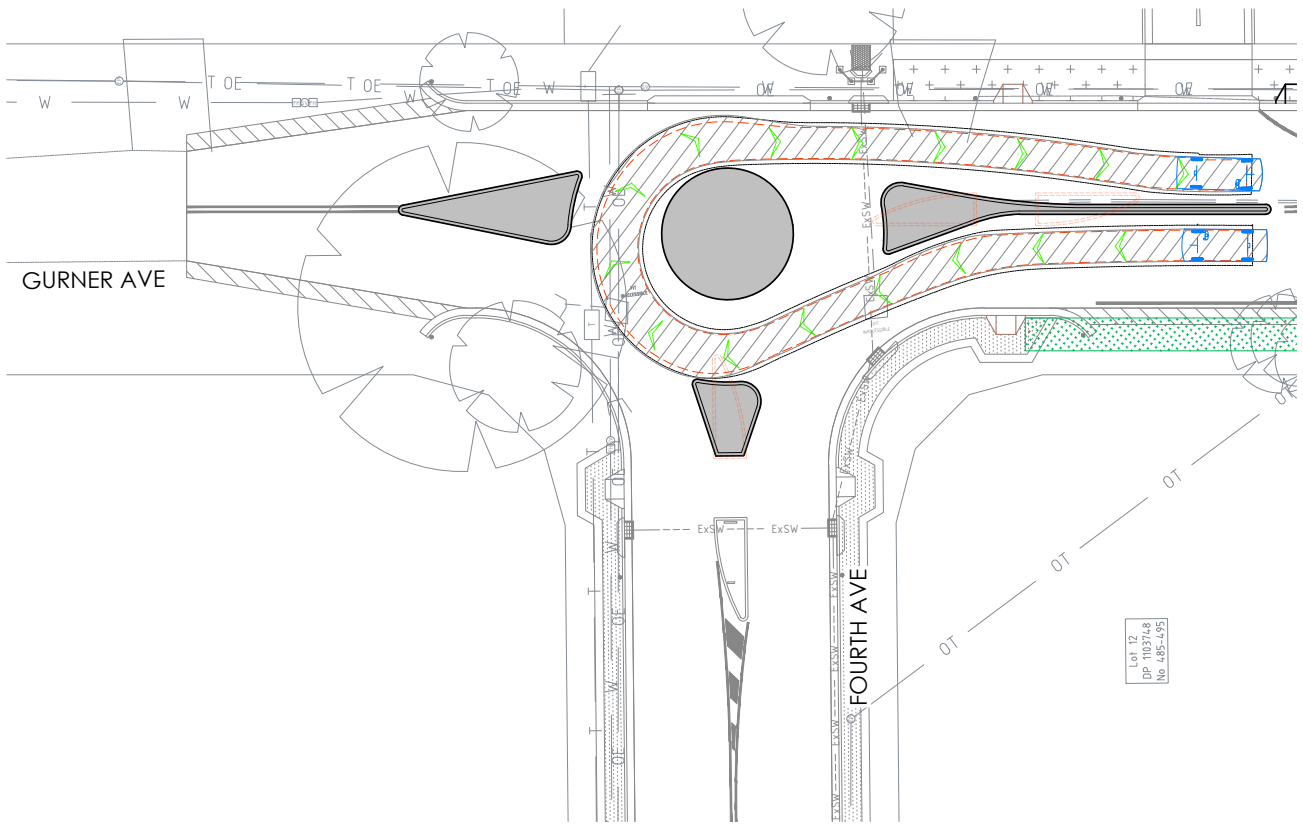
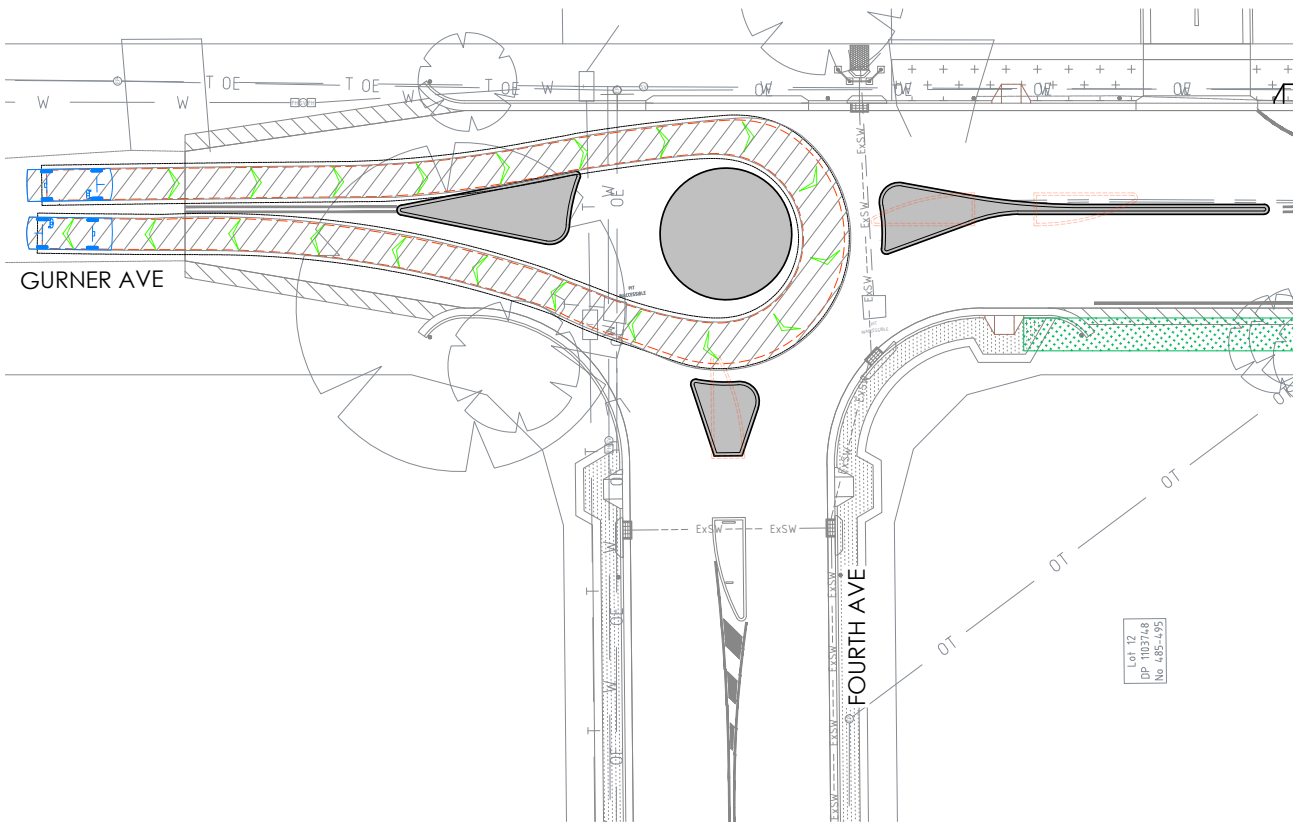
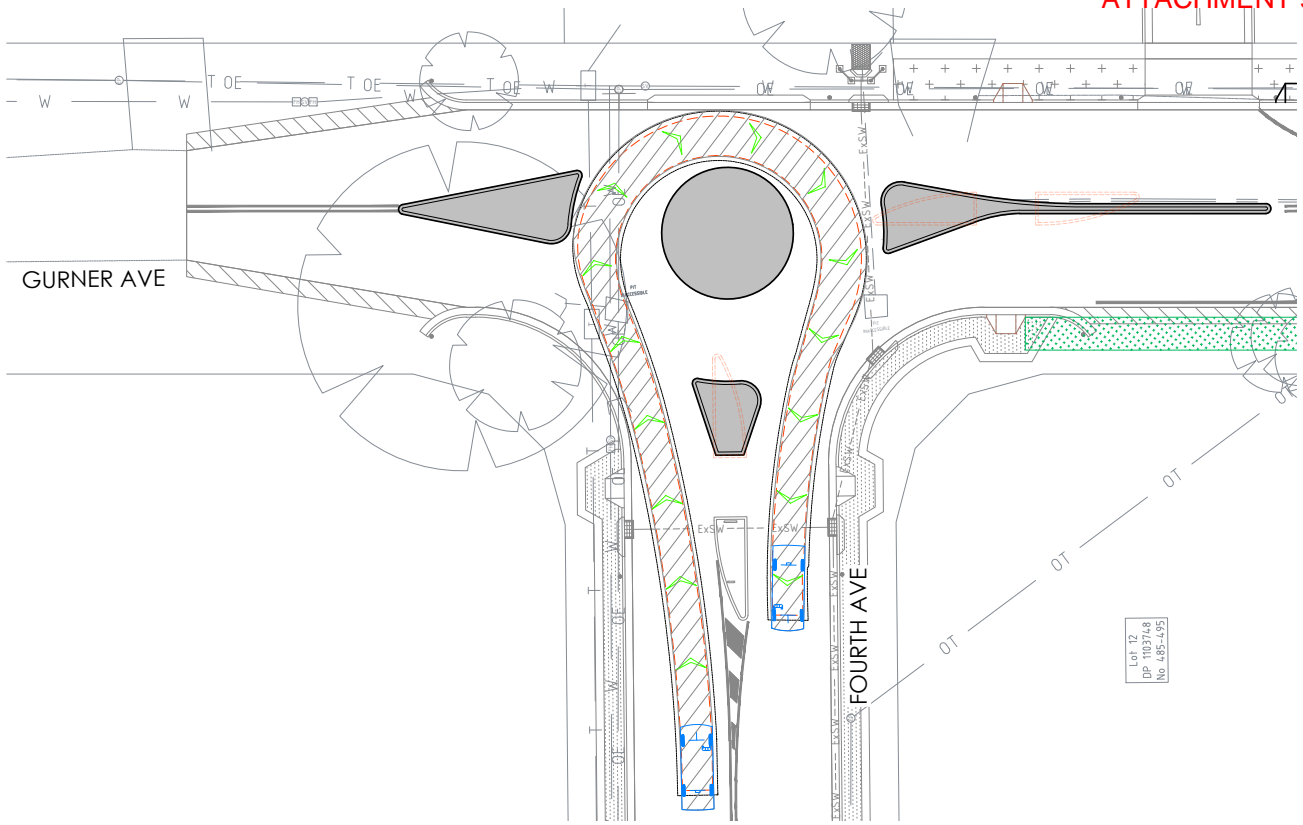


ATTACHMENT 9.2



Passenger vehicle (5.2 m)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.804m
Min Body Ground Clearance	0.295m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.300m



NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
3	31.08.23	TRAFFIC COMMITTEE APPROVAL	ER
2	10.08.23	ISSUED FOR COUNCIL REVIEW	ER
1	14.09.22	ISSUED FOR CO-ORDINATION	ER

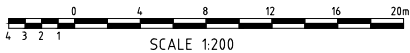


CLIENT
AL-FAISAL COLLEGE
STATUS
PRELIMINARY

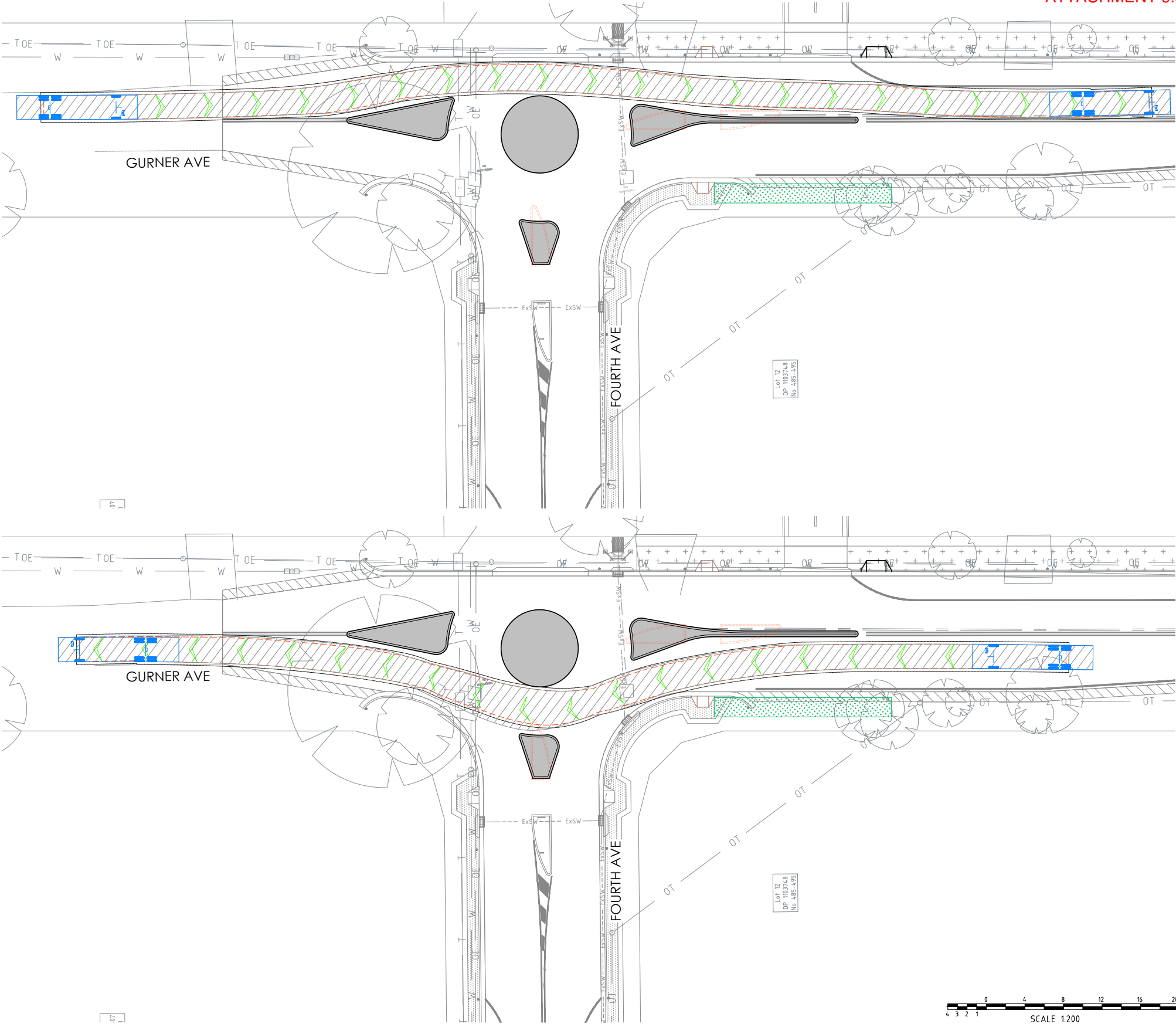
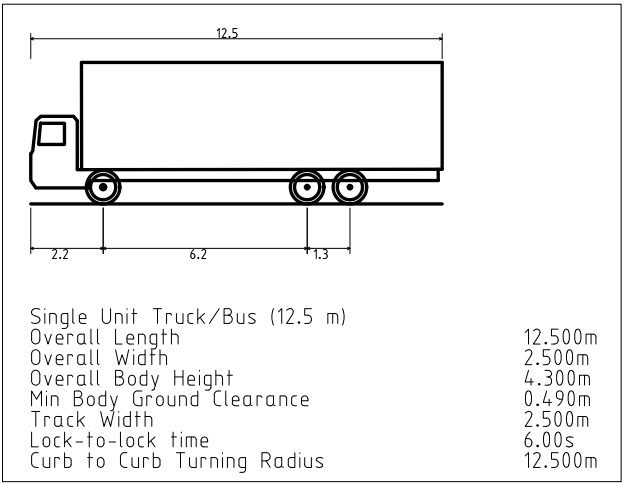
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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
SWEEP PATHS PLAN
SHEET 1

PROJECT
AL-FAISAL COLLEGE
ROUNDBOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179



PROJECT DETAILS
DESIGN RM
DRAWN ER
DATE AUG 23
DRG SIZE A1
SCALE 1:200
PROJECT SMCM
MGR
N0221063
C200 3
WWW.JN.COM.AU



NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
3	31.08.23	TRAFFIC COMMITTEE APPROVAL	ER
2	10.08.23	ISSUED FOR COUNCIL REVIEW	ER
1	14.09.22	ISSUED FOR CO-ORDINATION	ER



CLIENT
AL-FAISAL COLLEGE
STATUS
PRELIMINARY

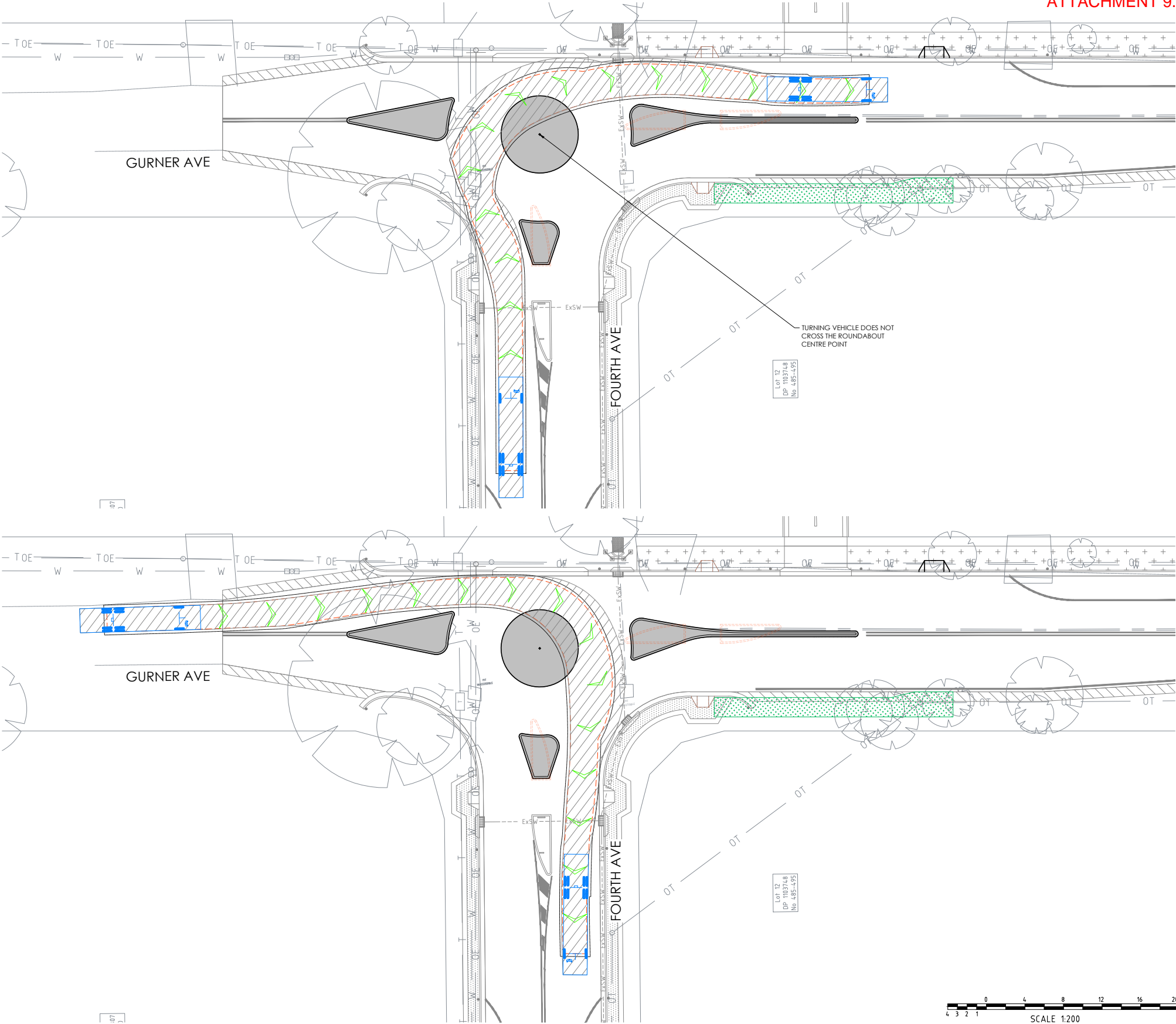
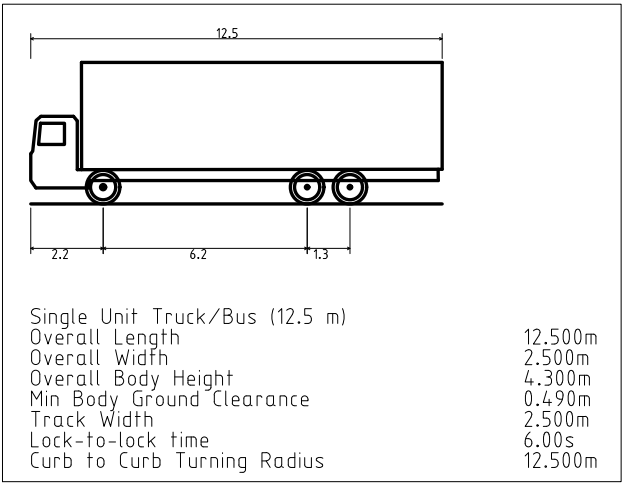
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DISCIPLINE
CIVIL DESIGN

DRAWING TITLE
SWEEP PATHS PLAN
SHEET 2

PROJECT
AL-FAISAL COLLEGE
ROUNDABOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179

PROJECT DETAILS
DESIGN RM
DRAWN ER
DATE AUG 23
DRG SIZE A1
SCALE 1:200
PROJECT SMGM
MGR
N0221063
C201 3
WWW.JN.COM.AU



NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
5	11.09.23	TRAFFIC COMMITTEE APPROVAL	ER
4	31.08.23	TRAFFIC COMMITTEE APPROVAL	ER
3	18.08.23	ISSUED FOR COUNCIL REVIEW	ER
2	10.08.23	ISSUED FOR COUNCIL REVIEW	ER
1	14.09.22	ISSUED FOR CO-ORDINATION	ER



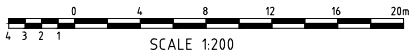
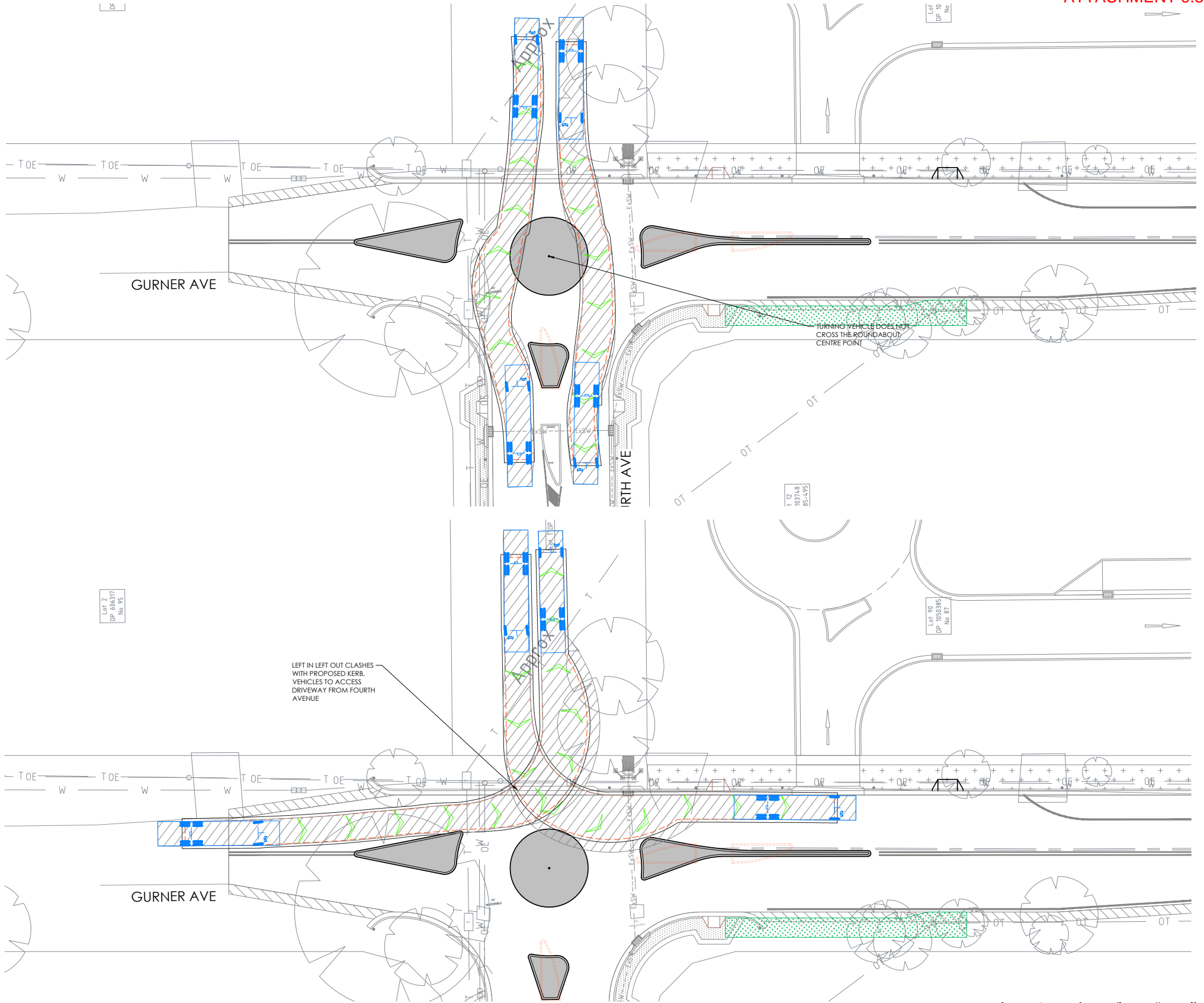
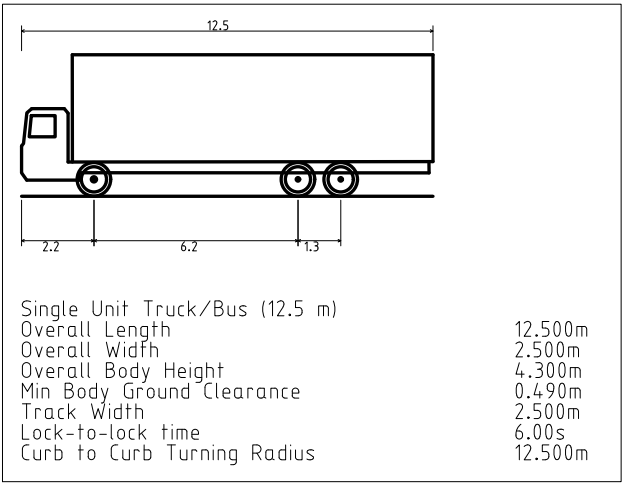
CLIENT
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STATUS
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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
SWEEP PATHS PLAN
SHEET 3

PROJECT
AL-FAISAL COLLEGE
ROUNDABOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179

PROJECT DETAILS
DESIGN RM
DRAWN ER
DATE AUG 23
DRG SIZE A1
SCALE 1:200
PROJECT SMGM
MGR
N0221063
C202 5
WWW.JN.COM.AU



NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
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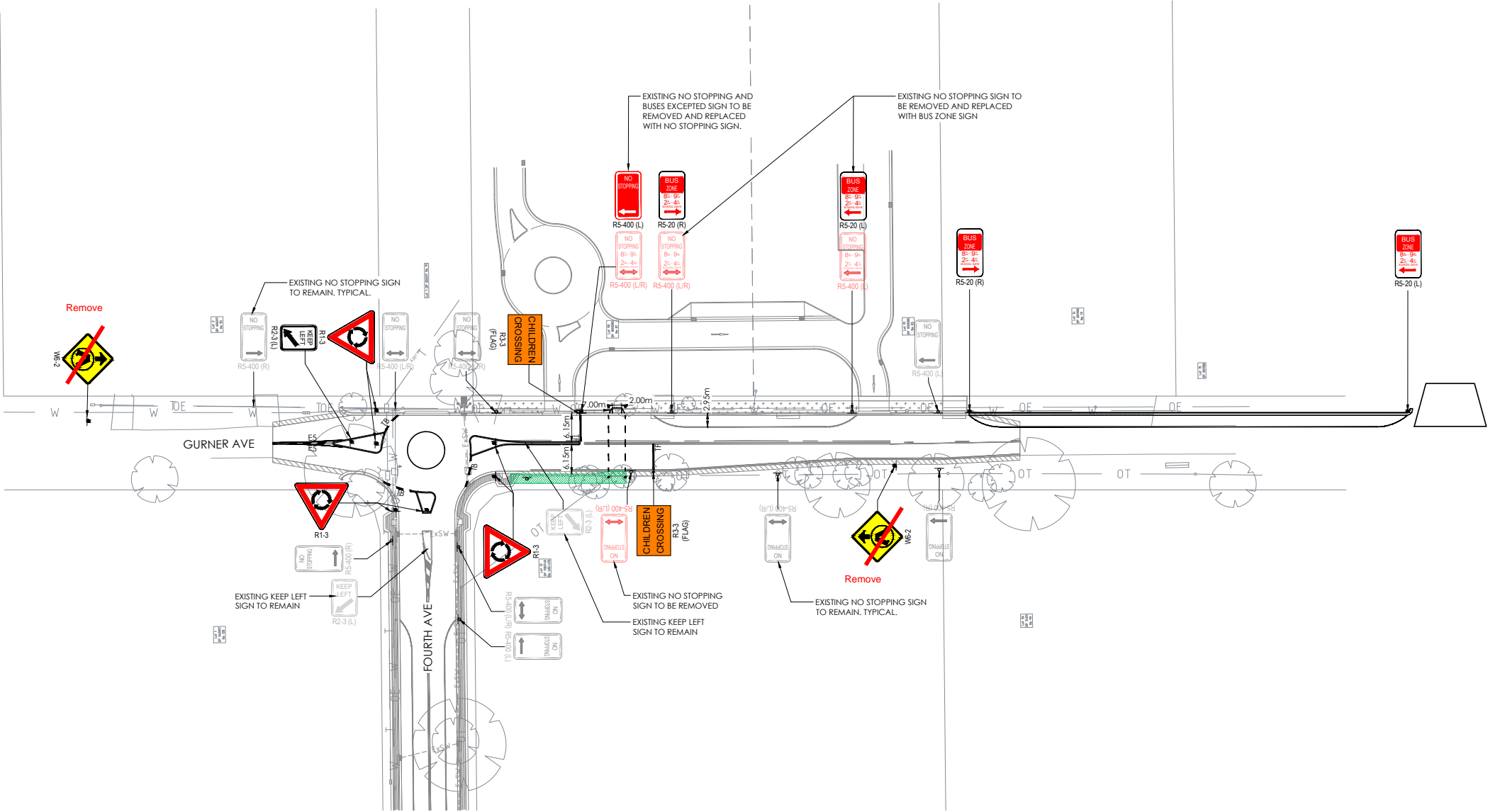


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STATUS
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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
SWEEP PATHS PLAN
SHEET 4

PROJECT
AL-FAISAL COLLEGE
ROUNDAABOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179

PROJECT DETAILS
DESIGN RM
DRAWN ER
DATE AUG 23
DRG SIZE A1
SCALE 1:200
PROJECT 3MCM
MGR
N0221063
C203 1
WWW.JN.COM.AU



NOT TO BE USED FOR CONSTRUCTION

AMDT	DATE	DESCRIPTION	BY
5	11.09.23	TRAFFIC COMMITTEE APPROVAL	ER
4	31.08.23	TRAFFIC COMMITTEE APPROVAL	ER
3	18.08.23	ISSUED FOR COUNCIL REVIEW	ER
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1	14.09.22	ISSUED FOR CO-ORDINATION	ER

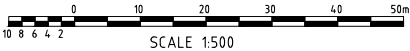


CLIENT
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STATUS
PRELIMINARY

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DISCIPLINE
CIVIL DESIGN
DRAWING TITLE
SIGNAGE AND
LINEMARKING PLAN

PROJECT
AL-FAISAL COLLEGE
ROUNABOUT DESIGN
ADDRESS
83-87 GURNER AVE AUSTRAL
NSW 2179



PROJECT DETAILS
DESIGN RM
DRAWN ER
DATE AUG 23
DRG SIZE A1
SCALE 1:500
PROJECT 5MCM
MGR
WWW.JN.COM.AU
N0221063
C300 5

CTTE 02

**Minutes of the Aboriginal Consultative
Committee meeting held on 7 September 2023**

Strategic Objective	Healthy, Inclusive, Engaging Communicate, listen, engage and respond to the community by encouraging community participation
File Ref	337996.2023
Report By	Jacqueline Newsome - Coordinator Community Development
Approved By	Tina Bono - Director Community & Lifestyle

EXECUTIVE SUMMARY

This report is tabled to present the Minutes of the Aboriginal Consultative Committee Meeting held on 7 September 2023.

RECOMMENDATION

That Council:

1. Receives and notes the Minutes of the Aboriginal Consultative Committee Meeting held on 7 September 2023.
2. Endorse the recommendations in the Minutes.

REPORT

The Minutes of the Aboriginal Consultative Committee meeting held on 7 September 2023 are attached for the information of Council.

The minutes contain the following actions or Committee recommendations:

- A document providing an overview of the heritage mapping process to be provided to the Committee at the next meeting; and
- Community Development Worker (First Nations) to make draft amendments to the Committee Charter for presentation at the next meeting.

FINANCIAL IMPLICATIONS

None of the actions contained in the minutes will have a financial impact on Council.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	Promote community harmony and address discrimination.
Civic Leadership	Facilitate the development of community leaders. Encourage the community to engage in Council initiatives and actions. Operate a well-developed governance system that demonstrates accountability, transparency, and ethical conduct.
Legislative	There are no legislative considerations relating to this report.
Risk	There is no risk associated with this report.

ATTACHMENTS

1. Minutes of the Aboriginal Consultative Committee meeting held on 7 September 2023



MINUTES FROM ABORIGINAL CONSULTATIVE COMMITTEE MEETING

7 September 2023

COUNCILLORS:

Councillor Betty Green

Liverpool City Council (**Chairperson**)

COMMITTEE MEMBERS:

Emma Eldridge
Darrell Fabar
Judy Fabar
Gail Smith
Stephen Dobell-Brown
Kerrienne Garrard
Christine Nickel

Aboriginal Community Member
Aboriginal Community Member
Aboriginal Community Member
Aboriginal Community Member
Community Member
Aboriginal Community Member
Aboriginal Community Member

COUNCIL ATTENDEES:

Michael Anderson
Ariz Ashraf
Dr Agata Calabrese
Supriya Singh

Community Development Worker First Nations
Senior Urban Designer
Senior Heritage Project Officer
Heritage Project Officer

APOLOGIES:

Steve Ingram
Sandy Oldfield

Aboriginal Community Member
Aboriginal Community Member



OPEN

Meeting opened at 6:00 pm.

1. WELCOME, ATTENDANCE AND APOLOGIES

Councillor Green welcomed everyone and opened the meeting.

Councillor Green acknowledged the traditional custodians of the land, the Cabrogal Clan of the Dharug nation, and paid respects to Elders past, present, and emerging.

Previous minutes were accepted by Emma Eldridge and seconded by Kerriane Garrard.

2. DECLARATIONS OF INTEREST

Nil

3. GUEST SPEAKERS

3.1 Dr Agata Calabrese and Supriya Singh – Liverpool City Council Heritage Mapping Project

A presentation of the LCC LGA Heritage mapping process was provided by Dr Agata Calabrese and Supriya Singh. The mapping will identify any new and existing heritage items across the LGA for inclusion on the listings which will be made available to the residents.

Councillor Green and Committee Member Emma Eldridge requested a written document that provides an overview of the actions occurring in the mapping process be provided at the next ACC meeting.

ACTION: A document providing an overview of the heritage mapping process to be provided to the Committee at the next meeting.

4. BUSINESS ARISING FROM PREVIOUS MINUTES

4.1 Dual naming at Civic Place

Committee member Emma Eldridge gave an update on the dual naming of meeting rooms and spaces at Civic Place. Emma has contacted traditional Cabrogal custodians and discussed including the Cabrogal words for the seven seasons as names in the Civic Tower.

4.2 Aerotropolis visit

Councillor Green advised that the team at Western Sydney Airport Co. are awaiting the recruitment of a First Nations Director to facilitate this tour.



5. GENERAL BUSINESS

5.1 Reconciliation Action Plan update

The draft Reconciliation Action Plan (RAP) has been deferred for further discussion with Councillors. The RAP will be presented to Council for endorsement at the October Council meeting.

5.2 Adding items to meeting agenda

Committee member Stephen Dobell-Brown sought clarification on the process for adding items to the meeting agenda for future committee meetings. Members were advised to submit agenda items to the Community Development Worker (First Nations) prior to the meeting for inclusion on the agenda.

5.3 Maria Locke Award

Committee member Stephen Dobell-Brown spoke about a proposed Maria Locke Award as part of one of Liverpool's broader awards activities. This award would recognise women in the community. His proposal received broad support from the committee for further investigation.

5.4 The Voice referendum

Committee members held a discussion on the upcoming referendum. The "yes" vote is broadly supported by the majority of committee members.

5.5 Changes to the Committee Charter

Committee members were advised of the intention to make some changes to the Committee Charter. The changes are intended to strengthen and formalise the membership procedures for this committee and align this committee charter with that of other similar committees of Council.

A draft amended charter will be presented to members for feedback at the next meeting.

ACTION: Community Development Worker (First Nations) to make draft amendments to the Committee Charter for presentation at the next meeting.

6. COUNCILLOR'S REPORT

Councillor Green noted that the relevant matters discussed at recent Council meetings had been addressed earlier in the agenda.

Councillor Green acknowledged the work of Emma Eldridge and her ongoing commitment to the First Nations community, as well as her work with Council on dual naming.

CLOSE

Meeting closed at 8:30pm.

CTTE 03

**Minutes of the Liverpool Access Committee
Meeting held on 14 September 2023**

Strategic Objective	Healthy, Inclusive, Engaging Support an inclusive community by fostering access and equity for all
File Ref	336964.2023
Report By	Jacqueline Newsome - Coordinator Community Development
Approved By	Tina Bono - Director Community & Lifestyle

EXECUTIVE SUMMARY

This report is tabled to present the Minutes of the Liverpool Access Committee meeting held on 14 September 2023.

RECOMMENDATION

That Council:

1. Receives and notes the Minutes of the Liverpool Access Committee meeting held on 14 September 2023;
2. Endorse the recommendations in the Minutes.

REPORT

The Minutes of the Liverpool Access Committee held on 14 September 2023 are attached for the information of Council.

The Minutes contain the following actions or Committee actions:

- Council's City Planning team to provide a response at the next meeting on ramp installation including responsibilities of building owners, tenants, and Council regarding accessibility of shops and businesses.
- Council's Property team and consultants responsible for Civic Place to be invited to the next meeting to provide updates to questions previously taken on notice for Civic Place; and

- Council to investigate the provision of water bottle refill facilities at local parks, including Greenway Oval, and provide a response to a future committee meeting.

FINANCIAL IMPLICATIONS

There are no financial implications relating to this report.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.
Social	Promote community harmony and address discrimination.
Civic Leadership	Facilitate the development of community leaders. Encourage the community to engage in Council initiatives and actions. Operate a well-developed governance system that demonstrates accountability, transparency, and ethical conduct.
Legislative	There are no legislative considerations relating to this report.
Risk	There is no risk associated with this report.

ATTACHMENTS

1. Minutes of the Liverpool Access Committee meeting held on 14 September 2023



MINUTES FROM THE LIVERPOOL ACCESS COMMITTEE MEETING

Thursday 14 September 2023

COUNCILLORS:

Councillor Karress Rhodes
Councillor Harle

Liverpool City Council (**Chairperson**)

COMMITTEE MEMBERS:

Grace Fava
Karen Pritchard
Ellie Robertson
Lana Zilla
Amanda Roa
Dimitri Mavro
Mhari Paterson
Theodora Hatzihrisafis

Community Member
Community Member
Community Member
Community Member
Community Member
Community Member
Community Member
Community Member

COUNCIL ATTENDEES:

Shaieste Heidari
Gabiella Rojas
Susan Roberts

Project Officer Stronger Children and Communities
Administration Officer Community and Lifestyle (minutes)
Administration Officer Community and Lifestyle (minutes)

GUEST SPEAKER:

Mark Loves

Procure Group

APOLOGIES:

Shereena Townsend
Christopher Bourke
Kaye Bruce
Theresa Tran
Paola Jamett-Caru

Community Member
Community Member
Community Member
Community Member
Community Development Worker



1. WELCOME, ATTENDANCE AND APOLOGIES

Councillor Rhodes welcomed the Committee and opened the meeting with an Acknowledgment of Country. Committee members and attendees introduced themselves.

2. DECLARATIONS OF INTEREST

Nil.

3. CONFIRMATION OF PREVIOUS MINUTES

The minutes for the July Committee meeting were accepted as a true record of the meeting.

Accepted: Ellie Robinson

Seconded: Grace Fava

4. BUSINESS ARISING FROM PREVIOUS MINUTES

4.1 Woodward Park

Grace stated that the previous minutes did not mention the expenditure of the Woodward Park project which is in a flood zone with limited accessibility to the main street. Requested that minutes include the cost of the project for new members to obtain insight.

Councillor Rhodes confirmed that Council has asked State Government whether it will be possible to not spend the full \$40 million on Brickmakers Creek, and potentially reallocate funds to other needs within the Liverpool LGA. Councillor Rhodes explained that they will be focusing on the hydraulics to mitigate the creek from flooding, which will be determined at a later date. Currently awaiting a response from the State Government.

Grace was not aware that the project also included hydraulics, was only informed of works to the playground. Councillor Rhodes expressed that works will be done to clean the creek, playground, and surrounding area, which will be confirmed at a later date.

A committee member shared that there are major issues concerning plans to remove the concrete dish drain and replace it with rocks and sandstone. It is being challenged by Council and surrounding councils with Sydney Water as they intend to pull up existing drains and naturalise these spaces. Concerns have been raised that this will compromise health and safety, and lead to flooding issues especially with the high velocity of water which will compromise the sandstone.

Committee members queried why so much money is going to a playground when there are so many other areas such as pathways for people with wheelchairs or shop frontages which need to be accessible.



It was noted that these concerns have been echoed by all Councillors regarding the \$40 million expenditure for Woodward Park. Council has written to the State Government to determine if they can reallocate the funds to other areas. Council is awaiting a response from the State Government.

4.2 Business on Railway Street

Concerns were raised about the shopfronts which face onto Railway Street. All these stores have a step for entry and no ramps. Councillor Rhodes stated access is usually the responsibility of the landlord/tenant; but noted the point about ramp installation which would be on Council property.

The building fire safety requirements are determined when a development consent and construction certificate are issued, or a DA is lodged for change of use. It is the building owner's responsibility to maintain the existing fire safety measures in a building and to submit an annual fire safety statement to Council.

Question: If it is the building owner or shopkeepers' responsibility to maintain fire safety guidelines, does this mean they will get fined if they don't follow them?

Answer: If building owners and shopkeepers don't pass compliance regulations regarding fire access or exits, they will be fined. Regulations change over the years, and when a new tenant is moving into the shop the DA is examined from the beginning. If it doesn't meet the requirements, it is the landlord or business owners' responsibility to make it acceptable.

ACTION: Council's City Planning team to provide a response at the next meeting on ramp installation including responsibilities of building owners, tenants, and Council regarding accessibility of shops and businesses.

4.3 Liverpool Civic Place

Committee members queried whether any proportion of street parking was accessible. Advice on this matter has not been provided yet. As the building of the Civic Centre has been completed, it was suggested that this may be addressed by providing car parking spots to be sign posted for more accessible parking.

Councillor Rhodes suggested inviting Council staff to the meeting in December to provide updates on the questions taken on notice as part of the Civic Place presentation held in the July meeting. The questions included provision of additional accessible parking spaces, signage, heights of benches/desks, number of accessible bathrooms and operating hours of these facilities, and the speed humps being used in the carpark.



Question: For the opening hours of the library and changing places toilet, what hours could this toilet be used?

Response: This operational matter and may be too early for a definitive answer. It would be good for the operational staff to be aware of concerns so they can be taken into consideration.

Question: Will an MLAK key be issued by Council for those with disabilities to use when facilities are locked? Other local shopping centres have Changing Places toilets, why doesn't Liverpool?

Answer: The library will be moving in from November onwards, and an answer will be sought on this issue prior to that date. It was previously agreed that the facilities in the Lurnea Community Hub will be mimicked due to excellent sizing and accessibility.

ACTION: Council's Property team and consultants responsible for Civic Place to be invited to the next meeting to provide updates to questions previously taken on notice for Civic Place.

Moved: Grace Fava

Seconded: Ellie Robertson

4.4 Changing Places facility – Whitlam Leisure Centre

An update was provided to the cleaning measures for the Changing Places toilet at the Whitlam Leisure Centre.

Daily cleaning has been assigned to the Duty Manager to ensure consistent and thorough maintenance of the change rooms. By assigning this responsibility within one department, a higher cleanliness and response standard will be maintained. Weekly deep cleaning of the Changing Places toilet has been scheduled.

4.5 Liverpool Hospital Upgrade

Councillor Rhodes provided an overview regarding accessibility concerns arising from the hospital upgrades.

A letter was drafted incorporating the feedback from the Committee and has been sent to Liverpool Hospital. More information will be provided pending a response from the hospital.

5. ACCESS NOTIFICATIONS

Nil.



6. GENERAL BUSINESS

6.1 Access Committee membership

Seven new members have been welcome to the Access Committee. Five existing members have had their membership renewed. The term of membership is two years.

6.2 Code of Conduct Presentation

Mark Loves facilitated a presentation on the Code of Conduct for new Committee members. Committee members have a duty to comply with the policies of Council, and expectations of all Committee members is to act with integrity.

6.3 Access Committee Charter

The Committee is founded under a Committee Charter, and all members are required to observe the provisions of Council's Code of Conduct and other relative policies applicable to the functioning of the Access Committee. Members with pecuniary interest must disclose this at meetings and exit during associated discussion.

Meeting frequency has now changed from bimonthly to quarterly.

6.4 Greenway Park Oval

A Committee member raised concern for the lack of facilities to refill bottles at local parks including Greenway Park Oval, especially with the warmer weather approaching.

This question was taken on notice. A response will be brought back to the Committee.

ACTION: Council to investigate the provision of water bottle refill facilities at local parks, including Greenway Oval, and provide a response to a future committee meeting.

6.4 Deceased wildlife at Middleton Grange

In Middleton Grange, the Western Sydney Parklands surrounding area poses a problem with deceased wildlife. Signage has been requested by residents for warning due to the distressing nature and accessibility to approaching the area. Committee members queried why Council has not attended to dispose / manage the deceased wildlife. To access the Parklands, there is one narrow bridge which poses a safety risk.

Committee members were advised that this issue will be raised at the next Traffic Committee meeting as well as the Western Sydney Parklands Committee meeting. Committee members are encouraged to raise and report issues to Council directly on 1300 36 2170.



7. CORRESPONDENCE

Nil.

8. CLOSE

Meeting closed at 2:38pm.

Next meeting 14 December 2023, venue to be confirmed.

CTTE 04

**Minutes of the Governance Committee meeting
held on 10 October 2023**

Strategic Objective	Visionary, Leading, Responsible Position Council as an industry leader that plans and delivers services for a growing city
File Ref	347249.2023
Report By	Jessica Saliba - Acting Manager Council & Executive Services
Approved By	Farooq Portelli - Director Corporate Support

EXECUTIVE SUMMARY

A Governance Committee Meeting was held on 10 October 2023.

This report attaches a copy of the minutes of the meeting for Council endorsement.

RECOMMENDATION

That Council:

1. Receives and notes the Minutes of the Governance Committee meeting held on 10 October 2023; and
2. Endorse the recommendations in the Minutes.

REPORT

The Minutes of the Governance Committee meeting held on 10 October 2023 are attached to this report.

The minutes contain the following actions or Committee recommendations:

Item No. 07 – Response Report – RV Parks**Action Items:**

1. The Coordinator Business Development to investigate and respond to why picnic and tents are allowed to be used at Helles Park, but not RV's.

Item No. 10 – Reconciliation Action Plan September 2023 - September 2024**Action Items:**

The workshop to include:

1. Identify what Council has already achieved in the Reconciliation Action Plan.
2. The reporting requirements for the Reconciliation Action Plan September 2023 – September 2024.
3. Why is it not possible for there to be a Liverpool Council Reconciliation Action Plan, that is specific to Liverpool, that is done by Liverpool and that is recognised by Liverpool and to show our engagement with our community.

Item No. 13 – Position and Staff Budget Report September 2023**Action items:**

For the CEO and Director Corporate Support to update the data and bring it back to the next Governance Committee Meeting.

FINANCIAL IMPLICATIONS

None of the actions contained in the minutes will have a financial impact on Council.

CONSIDERATIONS

Economic	There are no economic and financial considerations.
Environment	There are no environmental and sustainability considerations.

Social	There are no social and cultural considerations.
Civic Leadership	Provide information about Council's services, roles and decision making processes. Deliver services that are customer focused. Operate a well-developed governance system that demonstrates accountability, transparency and ethical conduct.
Legislative	There are no legislative considerations relating to this report.
Risk	The risk is deemed to be low and is considered to be within Council's risk appetite.

ATTACHMENTS

1. Governance Committee Minutes - 10 October 2023



MINUTES OF THE GOVERNANCE COMMITTEE MEETING HELD ON 10 OCTOBER 2023

PRESENT:

Mayor Ned Mannoun
Councillor Ammoun
Councillor Goodman
Councillor Green
Councillor Harle
Councillor Macnaught
Councillor Rhodes
Hon John Ajaka, Chief Executive Officer
Mr Farooq Portelli, Director Corporate Support
Ms Tina Bono, Director Community & Lifestyle
Ms Lina Kakish, Director Planning & Compliance
Mr Shayne Mallard, Director City Futures
Mr Jason Breton, Director Operations
Mr Vishwa Nadan, Chief Financial Officer
Ms Betty Boustani, Senior Advisor
Ms Elysa Dennis, Acting Manager Library and Museum Services
Mr Peter Scicluna, Manager Operational Support
Ms Rachel Din, Acting Business Analyst Operations Infrastructure Delivery
Ms Julie Scott, Manager Economic Development and Partnerships
Ms Susana Freitas, Acting Coordinator Business Development
Ms Jacqueline Newsome, Coordinator Community Development
Mr Yee Lian (Jason), Contributions Planning Officer
Mr Thomas Wheeler, Heritage Officer
Mr William Attard, Manager Development Assessment
Mr Craig Knappick, Chief People Officer
Mr David Day, Acting Manager Community Standards
Mr Tim Gavin, Strategic Property Consultant
Ms Jessica Saliba, Acting Manager Council and Executive Services
Ms Melissa Wray, Council and Executive Support Officer (minutes)

2

EXTERNAL GUESTS**Jan Richards Consultants**

Jan Richards

Australian Rail Track Corporation

Alec Brown, Communications and Stakeholder Engagement Manager, RTC NSW

Richard Tang, Senior Project Manager, Loop or LTC

The meeting commenced at 10.10am

ACKNOWLEDGEMENT OF COUNTRY

The acknowledgement of country was given by Ms Jan Richards from Jan Richards Consultants.

APOLOGIES

Councillor Hadid

Councillor Hagarty

Councillor Kaliyanda

Councillor Karnib

DECLARATIONS OF INTEREST

Mayor Mannoun declared a non-pecuniary declaration of interest in the following item:

Item 04 - Strategic Planning Work Program

Note: This item was deferred and not dealt with at this meeting.

The Chief Executive Officer declared a non-pecuniary less than significant interest in the following item:

Item 04 - Strategic Planning Work Program

Note: This item was deferred and not dealt with at this meeting.

3

STRATEGIC PERFORMANCE COMMITTEE

ITEM NO: ITEM 11
FILE NO: 332497.2023
SUBJECT: Independant Library Review

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun Seconded: Deputy Mayor Macnaught**

That the Governance Committee receives and notes the report.

On being put to the meeting the motion was declared CARRIED.

4

CEO left at 10.30am and returned at 10.33am

STRATEGIC PRIORITIES COMMITTEE

ITEM NO: ITEM 08
FILE NO: 298241.2023
SUBJECT: Cabramatta Loop Project Update

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Goodman**

The Governance Committee receives and notes the status of the Cabramatta Loop Project update.

On being put to the meeting the motion was declared CARRIED.

5

Clr Ammoun left at 10.51am and returned at 10.52am
Deputy Mayor Macnaught left at 10.52am and returned at 10.54am.
CEO left at 11.09am and returned at 11.10am.
Clr Ammoun left at 11.10am and returned at 11.11am.

ITEM NO: ITEM 09
FILE NO: 315139.2023
SUBJECT: Delivery Management Framework (DMF)

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Green**

That the Governance Committee notes the information.

On being put to the meeting the motion was declared CARRIED.

6

Clr Ammoun left at 11.16am and returned at 11.17am
Clr Ammoun left at 11.21am and returned at 11.22am.

ITEM NO: ITEM 07
FILE NO: 290535.2023
SUBJECT: Response report - RV Parks

COMMITTEE DECISION

Motion: **Moved: Clr Rhodes** **Seconded: Clr Goodman**

That the Governance Committee recommends Council:

1. Receives and notes the report;
2. Notes the significant impact transforming Black Muscat Park and Angle Park will have on community access to open green space; and
3. Council to receive official costings to transform Lehmanns Oval to an RV Park for 10 years.

On being put to the meeting the motion was declared CARRIED.

Action Items:

1. The Coordinator Business Development to investigate and respond to why picnic and tents are allowed to be used at Helles Park, but not for RV's.

7

Deputy Mayor Macnaught left at 11.26am and returned at 11.27am
Clr Goodman left at 11.37pm and returned at 11.38pm.
Clr Ammoun left at 11.49pm and returned at 11.50pm.

ITEM NO: ITEM 10
FILE NO: 295063.2023
SUBJECT: Reconciliation Action Plan September 2023 - September 2024

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Clr Green**

That the Committee recommends that Council conduct a workshop on the Reconciliation Action Plan September 2023 – September 2024.

On being put to the meeting the motion was declared CARRIED.

Action Items:

The workshop to include:

1. Identify what Council has already achieved in the Reconciliation Action Plan.
2. The reporting requirements for the Reconciliation Action Plan September 2023 – September 2024.
3. Why is it not possible for there to be a Liverpool Council Reconciliation Action Plan, that is specific to Liverpool, that is done by Liverpool and that is recognised by Liverpool and to show our engagement with our community.

RECESS

The Mayor called a recess of the meeting at 12.05pm

RESUMPTION OF MEETING

The Governance Committee meeting resumed at 12.48pm with Mayor Mannoun, Deputy Mayor Macnaught, Clr Ammoun, Clr Goodman, Clr Harle and Clr Rhodes present.

Clr Green retired from the meeting during recess.

8

Clr Ammoun left at 12.49pm and returned at 12.51pm.
Clr Goodman left at 12.56pm and returned at 12.57pm.
Mayor Mannoun left at 12.57pm and returned at 1.04pm

INFRASTRUCTURE AND PLANNING COMMITTEE

ITEM NO: ITEM 01
FILE NO: 312185.2023
SUBJECT: Voluntary Planning Agreement Monthly Status Report

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Deputy Mayor Macnaught**

That the committee receive and note this report.

On being put to the meeting the motion was declared CARRIED.

Clr Ammoun left at 1.23pm and returned at 1.24pm

ITEM NO: ITEM 02

FILE NO: 315205.2023

SUBJECT: Proposed heritage listing of 124 Moore Street, Liverpool

COMMITTEE DECISION

Motion:

Moved: Cllr Rhodes

Seconded: Cllr Harle

That the Committee recommends that Council:

1. Receives and notes the report; and
2. Direct the CEO to obtain further advice and information regarding the title of 124 Moore Street and report back to the next Governance Committee meeting.

10

ITEM NO: ITEM 03
FILE NO: 322837.2023
SUBJECT: Development Assessment

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Rhodes**

That the Governance Committee receives and notes the Development Assessment report.

On being put to the meeting the motion was declared CARRIED.

11

ITEM NO: ITEM 04
FILE NO: 328425.2023
SUBJECT: Strategic Planning Work Program

COMMITTEE DECISION

This item was deferred.

Mayor Mannoun and Chief Executive Officer declared a Conflict of Interest.

12

Mayor Mannoun left at 1.42pm and returned at 2.00pm

ITEM NO: ITEM 05
FILE NO: 328175.2023
SUBJECT: Compliance and Enforcement Policy

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Deputy Mayor Macnaught**

That the Committee recommends that Council:

1. Endorse the draft 'Compliance & Enforcement Policy' for public exhibition for a period of not less than 28 days (Attachment 1).
2. Direct the CEO to report back to council at the end of the exhibition period.

On being put to the meeting the motion was declared CARRIED.

13

Clr Ammoun left at 2.10pm and returned at 2.11pm.
Deputy Mayor Macnaught left at 2.11pm and returned at 2.13pm.
Mayor Mannoun left at 2.20pm and returned at 2.25pm.
Clr Rhodes left at 2.22pm and returned at 2.25pm.

BUDGET COMMITTEE

ITEM NO: ITEM 06
FILE NO: 315158.2023
SUBJECT: Review of Council's Financial progress, forecasts and assumptions

COMMITTEE DECISION

Motion: **Moved:** Cllr Harle **Seconded:** Cllr Ammoun

That the Governance Committee receives and notes the report.

On being put to the meeting the motion was declared CARRIED.

MOTION TO MOVE INTO CONFIDENTIAL SESSION

Motion: **Moved: Mayor Mannoun** **Seconded: Deputy Mayor Macnaught**

That the Committee move into Confidential Session pursuant to s10A(2)(c) of the Local Government Act 1993 because this item contains information that would, if disclosed, confer a commercial advantage on a person with whom the Council is conducting (or proposes to conduct) business.

On being put to the meeting the motion was declared CARRIED.

CLOSED SESSION**CONFIDENTIAL ITEMS**

ITEM NO: ITEM 12
FILE NO: 315142.2023
SUBJECT: Liverpool Civic Place Project Update

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Rhodes**

That the Committee receives and notes this report.

On being put to the meeting the motion was declared CARRIED.

15

ITEM NO: ITEM 13
FILE NO: 331914.2023
SUBJECT: Position and Staff Budget Report September 2023

COMMITTEE DECISION

Motion: **Moved: Mayor Mannoun** **Seconded: Cllr Ammoun**

That the Governance Committee notes and considers the report as provided.

On being put to the meeting the motion was declared CARRIED.

Action Items:

For the CEO and Director Corporate Support to update the data and bring it back to the next Governance Committee Meeting.

THE MEETING CLOSED AT 3.05pm

QWN 01

**Question with Notice - Cllr Rhodes - Koala Kill
Zone Heathcote Road**

Strategic Objective	Liveable, Sustainable, Resilient Protect and enhance our natural environment and increase the city's resilience to the effects of natural hazards, shocks and stresses
File Ref	345417.2023

QUESTION WITH NOTICE

Background

Mitigation to help preserve and protect Koala population in the South West Sydney area remains a great responsibility of all South West Sydney Councils including Liverpool and Sutherland, who apart from being home to recently identified colonies, it is recognised that our mutual LGA's are also a known migration path for Koalas from the Campbelltown area through Liverpool and Sutherland and back into Campbelltown LGA.

Studies have shown an alarming increase in Koala Kill zones along Heathcote Road and Liverpool Council has been collaboratively engaged to assist to mitigate the threat of Road kill along this road. The koala kill zone at Deadmans Creek goes from around the bottom of the hill coming down from Pleasure Point to the Deadmans Creek bridge. Koalas have been killed around the quarry also, but the main area they are hit is at the bottom of that hill.

There has been a request from constituents that there is a need for more and or repositioning of Koala road signs and/or speed limits imposed on this section of Heathcote Road.

The below map has identified the additional need for Koala signs on Heathcote Road up to the Pleasure Point intersection, making sure the signs are positioned before you enter the recognised kill zone from both directions not after you have passed the kill zone.



The attached Transport for NSW report shows options to reduce Koala vehicle strike along Heathcote Road, near Deadman's Creek.

Please address the following:

- 1. What mitigation measures are being delivered by any, or each of the collaboration partners, to reduce the koala road kill along Heathcote Road and when they will be delivered?**

Response (Provided by the Operations Directorate)

Transport for NSW (TfNSW) is the principal land manager for Heathcote Road.

Council officers have been actively involved in advocating for increased koala protection within the LGA, including Heathcote Road.

Some of the mitigation measures that have been or are being delivered to increase koala protection along Heathcote Road include:

- Installation of koala warning signs along Heathcote Road to alert drivers that they are entering a 'Koala Zone'. This approach is taking key learnings from other koala hotspot areas in NSW.
- TfNSW in partnership with the NSW Koala Strategy, NSW Environment and Heritage has deployed two temporary trailer mounted variable message signs (VMS) on Heathcote Road facing east and west for 12 weeks during the current peak koala breeding season (from August to February). A further six permanent static signs have

been installed at koala vehicle strike hot spots along Heathcote Road to complement the VMS at these hotspots.

- The NSW Koala Strategy and Council sought advice from Campbelltown City Council to gain insights into their trailer-based VMS program. Similar phrasing on the signs for consistency is used across nearby local government areas (e.g. “Koala Breeding Season”, “Be Alert Koalas About”).
- A fauna underpass has been constructed by the NSW Koala Strategy in partnership with TfNSW along Deadman’s Creek, underneath Heathcote Road. The underpass was delivered as part of the Heathcote Road upgrade works, creating a safe passage for koalas to cross. Council staff were involved in consultation on the design and installation of the underpass.
- In response to the report commissioned by TfNSW, *Options to Reduce Koala Vehicle Strike Along Heathcote Road, Near Deadmans Creek*, dated December 2021 prepared by WSP Pty Ltd, TfNSW and the NSW Koala Strategy is planning to install fauna fencing (koala exclusion fencing) along Heathcote Road in the next 18 months. TfNSW and Defence are discussing the fencing design to address security concerns in relation to Defence land.
- The NSW Koala Strategy will provide funding for Liverpool City Council and Sutherland Shire Council to each purchase a trailer mounted VMS and vehicle activated signs to be deployed when required in their LGAs. The additional two VMS in areas along and around Heathcote Road will complement Campbelltown City Council’s VMS. It is anticipated that the funding for the additional two VMS will be available by December 2023.
- TfNSW is undertaking monitoring to assess whether the VMS trailers have any influence on driver behaviour. This will help guide future decisions about the VMS trailers and future koala roadkill mitigation measures.

Council is also involved with related roadkill mitigation communications. A variety of communication channels are used, including but not limited to:

- Council’s Sustainable Living newsletters
- Koala Conservation Project’s Facebook Page. *The Southwest Sydney Koala Project* can be followed on Facebook: <https://www.facebook.com/swskoalaproject/>
- Council’s social media pages
- School newsletters (to target parents/guardians dropping off kids) at the surrounding schools that are in close proximity to the koala population around Heathcote Road. Communication is ongoing and increases during the koala breeding season.

ATTACHMENTS

1. Transport for NSW report - Options to reduce koala vehicle strike along Heathcote Road, near Deadmans Creek

TRANSPORT FOR NSW

DECEMBER 2021

PUBLIC

OPTIONS TO REDUCE KOALA VEHICLE STRIKE ALONG HEATHCOTE ROAD, NEAR DEADMANS CREEK

wsp



Question today

Imagine tomorrow

Create for the future




Options to reduce Koala vehicle strike along Heathcote Road, near Deadmans Creek

Transport for NSW

WSP
Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
wsp. com

REV	DATE	DETAILS
C	13.12.2021	Final

	NAME	DATE	SIGNATURE
Prepared by:	Josie Stokes	13.12.2021	
Reviewed by:	Rodney van der Ree	13.12.2021	
Approved by:	Alex Cockerill	13.12.2021	

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APPENDIX C COASTAL SEPP MAPPING

ABBREVIATIONS

BAM	Biodiversity Assessment Methodology (2020)
BC Act	NSW <i>Biodiversity Conservation Act 2016</i>
Defence	Department of Defence
DPIE	NSW Department of Planning, Industry and Environment
DPI	Department of Primary Industries
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
GLALC	Gandangara Local Aboriginal Lands Council
LCC	Liverpool City Council
PCT	Plant Community Type
NPA	National Parks Association of NSW
NPWS	NSW National Parks and Wildlife Service
PKFT	Preferred koala food tree
SCC	Sutherland Shire Council
TfNSW	Transport for New South Wales
WVC	Wildlife-vehicle collision

EXECUTIVE SUMMARY

One of the commitments of the NSW Koala Strategy 2018-21 is to improve the safety and health of koala populations by ‘fixing priority koala roadkill hotspots across NSW’. In consultation with NSW National Parks and Wildlife Service, Sutherland Shire Council (SCC), Liverpool City Council (LCC), Department of Defence and Gandangara Local Aboriginal Lands Council, Transport for NSW (TfNSW) and Department of Planning, Industry and Environment (DPIE) are investigating options to reduce koala vehicle-strike along Heathcote Road, near Deadmans Creek, in south-western Sydney. The options assessment is not funded through the NSW Koala Strategy.

WSP has been engaged by TfNSW to develop mitigation options that could be implemented to reduce koala vehicle-strike on Heathcote Road, near Deadmans Creek.

To achieve this, the following was undertaken:

- a review of relevant and available background information
- field survey to validate vegetation mapping and determine the nature and condition of vegetation within the study area
- site visit with relevant stakeholders (DPIE, TfNSW, Southern Sydney Branch of National Parks Association of NSW, LCC, Sutherland Shire Environment Centre and Sandy Point residents)
- assessment of koala habitat around Deadmans Creek and predicted used of the locality by koalas
- identification of potential mitigation locations and options, and a qualitative assessment of the various mitigation options.

Information collected during the desktop assessment and field survey was used in the mitigation option assessment.

The feasible options for reducing koala vehicle strike along Heathcote Rd are limited to the installation of fauna fencing and improving the conditions of the existing bridge over Deadmans Creek. The main differences in the various options relate to the length of fauna fencing proposed and how the fence ends are treated.

The main options assessed included:

- **Option 1:** Fencing Heathcote Rd road reserve (including fencing above the rock cutting near St George Crescent), improving the conditions of the Deadmans Creek bridge underpass and installing a koala grid on St George Crescent.
- **Option 2:** Install shorter lengths of fauna fence along the road reserve of Heathcote Road (north-west of the bridge) and utilising existing Defence fence (some of which may need to be modified), improving the conditions of the Deadmans Creek bridge underpass and installing a koala grid on St George Crescent.
- **Option 3:** Install shorter lengths of fauna fence along the road reserve of Heathcote Road to avoid impacts to land mapped as coastal wetlands under the Coastal Management SEPP 2018, and improving the conditions of the Deadmans Creek bridge underpass and installing a koala grid on St George Crescent.
- **Option 4:** Extension of fencing along Heathcote Rd up to the Quarry entrance. This can be applied to any of the options and where appropriate, existing Defence fencing would be used (some of which may need to be modified).

Based on the outcomes of the qualitative options assessment the highest scoring option is Option 2. Option 2 is also consistent with ‘How to keep koalas off the road – Koala vehicle strike factsheet 2’ (DPIE, 2020b), as long, uninterrupted sections of fauna fencing used in conjunction with crossing structures such as bridges are proven to be effective for mitigating koala vehicle strike.

1 BACKGROUND

1.1 CONTEXT

The NSW Koala Strategy 2018-21 is part of a long-term vision to stabilise and then increase the koala population across the State. The strategy supports a range of conservation actions that will provide more habitat for koalas, support local community action, improve koala health and safety, and increase knowledge to improve koala conservation.

The installation of koala exclusion fencing along Picton Road in south-west Sydney to address two known koala vehicle-strike hotspots as part of the Koala Strategy announced in 2019, and ongoing monitoring has shown koalas using existing underpasses to cross Picton Road safely (DPIE, 2020b).

Local evidence shows koalas are killed by vehicle strike on Heathcote Road, particularly near Deadmans Creek. The site was not identified in a 2019 TfNSW statewide analysis of koala vehicle strike hotspots. The southern Sydney branch of the National Parks Association have submitted information to DPIE and TfNSW that shows the site is likely a local priority and is of concern amongst local environmental community groups. Further state-wide analysis will be undertaken by TfNSW and DPIE to assess whether the site is a statewide priority.

In consultation with NSW National Parks and Wildlife Service (NPWS), Sutherland Shire Council (SSC), Liverpool City Council (LCC), Department of Defence (Defence) and Gandangara Local Aboriginal Lands Council (GLALC), TfNSW and DPIE are investigating options to reduce koala vehicle-strike along Heathcote Road, near Deadmans Creek, in south-western Sydney.

This report provides an assessment of proposed mitigation measures designed to minimise koala vehicle-strike in this locality.

1.2 OBJECTIVES AND SCOPE

This project aimed to develop mitigation options to be considered by government and local councils that could be implemented to reduce koala vehicle-strike on Heathcote Road, near Deadmans Creek.

Specifically, the project aimed to:

- reduce koala vehicle-strike through the implementation of mitigation options recommended
- reduce the barrier effects of Heathcote Road and enhance regional connectivity for fauna movement, through the implementation of options that promote safe passage in known wildlife corridors.

To achieve these aims, the following scope was undertaken for this options assessment report:

- a review of relevant and available background information
- field survey to validate vegetation mapping and determine the nature and condition of vegetation within the study area
- site visit with relevant stakeholders (DPIE, TfNSW, NPA, LCC, GLALC, NPWS and Sutherland Shire Environment Centre and Sandy Point residents)
- assessment of koala habitat around Deadmans Creek and predicted used of the locality by koalas
- identification of potential mitigation locations and options, and a qualitative assessment of the various mitigation options.





Options to reduce Koala vehicle strike along Heathcote Road

Figure 1.1
Study Area

Legend

- Watercourses
- Cadastre
- Road Corridor
- Study Area
- NPWS Reserve
- Defence Area



0 110 220
m

Coordinate System: GDA2020 MGA Zone 56
Scale ratio correct when printed at A3
1:6,000 Date: 9/24/2021

Data Sources: Imagery © Department of Customer Service, 2020
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2 METHODOLOGY

The following methods have been undertaken in the preparation of this report. All work was carried out under the appropriate licences, including a scientific licence as required under Part 2 of the BC Act (License Number: SL100630) and an Animal Research Authority issued by the DPI (Agriculture).

The contributors to the preparation of this report, their qualifications and roles are provided in Table 2.1 below.

Table 2.1 Personnel

NAME	QUALIFICATIONS	POSITION	ROLE
Josie Stokes	Bachelor of Science (Conservation Zoology)	Principal Ecologist	Project Manager Reporting Field Survey
Debbie Landenberger	Bachelor of Science (Hons); Accredited BAM Assessor (BAAS 18187)	Principal Ecologist	Reporting and field survey
Alex Cockerill	Bachelor of Science (Hons) Accredited BAM Assessor (BAAS17020)	National Team Executive - Ecology	Technical review
Dr Rodney van der Ree	Bachelor of Science (Hons) Doctor of Philosophy, Deakin University	National Technical Executive - Ecology	Technical expert
David Naiken	Bachelor of Environmental Science (Major GIS). Masters of Climate Change	GIS consultant	Mapping and data management

2.1 DESKTOP ASSESSMENT

A desktop assessment was undertaken to inform potential options to reduce koala vehicle collisions along Heathcote Road, near Deadmans Creek. This involved a review of relevant and available background information about the local koala population, movement corridors, and availability of habitat and resources within the locality and region including:

- SEED Koala Corridors in south-west Sydney (DPIE, 2021b)
- BioNet Atlas of NSW Wildlife – NSW Department of Planning, Industry and Environment (DPIE, 2021)
- NSW Environment, Energy and Science Vegetation Types Database.
- Conserving Koalas in the Wollondilly and Campbelltown LGAs (DPIE, 2019)
- Koala Corridor Project Campbelltown City Council and Wollondilly LGAs (Biolink, 2018)
- Planning Guidelines for Koala conservation and recovery- a guide to best planning practice (McAlpine et al, 2007)
- Koala-sensitive Design Guideline (DES, 2019)
- Koala vehicle strike methodology (TfNSW, 2019)
- Existing broad-scale vegetation maps of the local area.
- Topographic maps and aerial photographs.

A likelihood of occurrence has not been undertaken for threatened flora or fauna species with the potential to occur within the study area as the planning pathway has not yet been determined. A full list of threatened flora and fauna species predicted to occur within the locality is outlined in the Heathcote Road Bridge Widening Biodiversity Assessment Report (TfNSW, 2020).

2.2 NOMENCLATURE

Names of vegetation communities used in this report are based on the Plant Community Types (PCTs) used in the NSW BioNet Vegetation Classification Database (Environment Energy and Science, 2021c). These names are cross-referenced with those used for threatened ecological communities listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Names of plants used in this report follow PlantNet (Royal Botanic Gardens, 2021). Scientific names are used in this report for species of plant. The names of introduced species are denoted with an asterisk (*).

For threatened species of plants, the names used in the BioNet Atlas of NSW Wildlife (Environment Energy and Science, 2021b) are also provided where these differ from the names used in the PlantNet database.

Names of vertebrate fauna follow the Australian Faunal Directory maintained by the Department of Agriculture, Water and Environment (DAWE) (2021a). Common names are used in the report for species of animal. Both common and scientific names are provided in appendices.

For threatened species of animals, the names used in the BioNet Atlas of NSW Wildlife and Department of Primary Industries (DPI) Spatial Data Portal (2021) are provided.

2.3 FIELD SURVEY

The field surveys aimed to ground-truth the results of the background research including desktop analysis of vegetation and habitat assessment. The floristic diversity was assessed using the Biodiversity Assessment Methodology (BAM) (DPIE, 2020). The field survey was undertaken on 10 May 2021 by two WSP ecologists.

2.4 VERIFICATION OF EXISTING VEGETATION MAPPING

Vegetation within the study area and locality has been previously mapped at the regional scale by the *Native Vegetation of the Sydney Metropolitan Area* (OEH, 2013).

Field validation (ground-truthing) of this existing mapping within the study area was completed to confirm the vegetation structure, dominant canopy species, native diversity, underlying geology, condition and presence of threatened ecological communities. This was based on the completion of random meanders, rapid data points and drive-by assessments.

Five vegetation integrity plots, as described in the BAM 2020 (DPIE, 2020) were completed across all vegetation types recorded.

The information collected during the survey was used to determine the Plant Community Type (PCT) for each vegetation type recorded as detailed in the BioNet Vegetation Classification System (Environment Energy and Science Group, 2020b) and whether vegetation within the study area aligned to any State or Commonwealth listed ecological communities.

2.5 PLOT AND TRANSECT SURVEYS

Vegetation surveys were carried out in accordance with the BAM (DPIE, 2020). A plot-based full floristic survey was carried out based on a 20 m x 20 m quadrat, with function data collected using and 20 m x 50 m plot (henceforth referred to as a vegetation integrity plot (VI plot)). The locations of the BAM plots are described in Table 2.2 shown in Figure 3.1.

Native vegetation recorded within the study area was aligned to Plant Community Types (PCTs) as contained in the BioNet Vegetation Classification Database (Environment Energy and Science Group, 2021). This was achieved by identifying native vegetation to formation, class and type and its corresponding Threatened Ecological Community (where applicable). Furthermore, other characteristics such as floristic composition, underlying geology, soil type, landform and other description attributes were collected where available and assessed against BioNet Vegetation Classification Database PCT profiles.

Table 2.2 Location of BAM VI plots completed within the study area

PLOT ID	VEGETATION TYPE AND ZONE	CONDITION	EASTING	NORTHING	ORIENTATION
Q1	PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau	Good	314442	6238136	56°
Q2	PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion	Moderate	314385	6238280	310°
Q3	PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion	Moderate	314363	6238303	330°
Q4	PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau	Good	314458	6238209	305°
Q5	PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau	Good	314555	6238050	168°

Note: Zone 56, GDA94

2.6 CONDITION OF VEGETATION

Vegetation in the study area was firstly assessed to a PCT and then aligned to a vegetation zone which is defined in the BAM 2020 as ‘an area of native vegetation on the subject land that is the same PCT and has a similar broad condition state’ (DPIE, 2020). A broad condition state infers that the vegetation has a similar tree cover, shrub cover, ground cover, weediness or combinations of these attributes which determine vegetation condition.

The broad condition states which were applied to vegetation in the study area are summarised in Table 2.3 below. These factors were defined by using factors such as levels of disturbance, weed invasion and resilience.

Table 2.3 Vegetation broad condition states

CONDITION CATEGORY	DESCRIPTION
Good	Vegetation still retains full species complement and structural characteristics. The vegetation displays resilience to weed invasion due to intact groundcover, shrub and canopy layers. Native species diversity is relatively high. Weeds may exist in this vegetation type but generally exhibit <5% foliage cover.
Moderate	Vegetation has retained a native canopy but the understorey and groundcover layers are generally co-dominated by exotic species that generally exhibit between 5–49% foliage cover. The mid and low strata may have been structurally modified as a result of previous clearing.
Low	Vegetation has retained a native canopy or the canopy cover is showing occasional signs of regeneration. The understorey and groundcover layers of this condition are absent and/or the understorey is generally dominated or co-dominated by exotic species (i.e. foliage cover >50%). Native species diversity is generally relatively low and the mid and low strata have been structurally modified.

2.7 CONSULTATION

Consultation was undertaken with representatives from:

- Transport for New South Wales
- Department of Planning Industry and Environment
- Southern Sydney Branch, National Parks Association of NSW
- Liverpool City Council
- George's River Environmental Alliance
- Sutherland Shire Environment Centre
- Sandy Point Residents.

This included a site visit to Deadmans Creek Bridge on 26 May 2021, and ongoing email correspondence with Sutherland Shire Environment Centre relating to concern about koala roadkill in the study area and locality.

Additional consultation was undertaken with koala expert Dr Steve Phillips (Biolink) to confirm koala feed tree species and likely movement corridors within the locality.

2.8 KOALA RECORDS WITHIN THE LOCALITY

All koala observation and vehicle strike records for the past 10 years records within a 10-kilometre radius of the study area were obtained from the BioNet Atlas of NSW Wildlife (DPIE, 2021) and are presented for regional context in Figure 3.2.

Koala observation and vehicle-strike records for the past 10 years along Heathcote Road and St George Crescent were mapped and are presented in Figure 3.3.

BioNet data has been updated recently and now includes records from the I Spy Koala App and the NSW Wildlife Rehab Database. Koala habitat and potential movement corridors are discussed in Section 3.6 and presented in Figure 3.3.

3 EXISTING ENVIRONMENT

This section describes the environmental context of the study area including abiotic and biotic features of the landscape area. The context of the study area assists in determining PCTs and potential impacts on existing PCTs if clearing is required for installation of fauna fencing.

3.1 SUMMARY OF LANDSCAPE FEATURES

The landscape context of the study area, including IBRA bioregions and subregions, Mitchell landscapes, catchment areas and land uses are described in Table 3.1 below.

Table 3.1 Landscape features

LANDSCAPE FEATURE	SUBJECT LAND
IBRA bioregions and subregions	Sydney Basin Bioregion/SYB10 Sydney Cataract
NSW landscape regions (Mitchell landscapes)	Woronora Plateau
Local Government Area (LGA)	Liverpool City Council and Sutherland Shire Council
Rivers and streams	Deadmans Creek, Georges River
Wetlands	Coastal Management SEPP 2018 has mapped coastal Wetlands and associated proximity buffers within the study area.
Connectivity features	Native vegetation within the study area is part of a large extent of native vegetation. To the north are patches of native vegetation which occur on the banks of the Georges River and extend into Georges River National Park. A large area of high quality intact native vegetation occurs to the south of Heathcote Road which is part of the Holsworthy Defence Base.
Areas of Geological Significance and Soil Hazard Features	There are no areas identified to have geological significance. Potential high-risk acid sulphate soils to occur along Deadmans Creek and have been identified within the study area.
Areas of outstanding biodiversity value	None recorded

3.2 PLANT COMMUNITY TYPES

Two NSW Plant Community Types (PCTs) were recorded in the study area:

- PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau– high condition.
- PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion – moderate condition.

In addition, one non-native vegetation type was assigned to a miscellaneous ecosystem class, being:

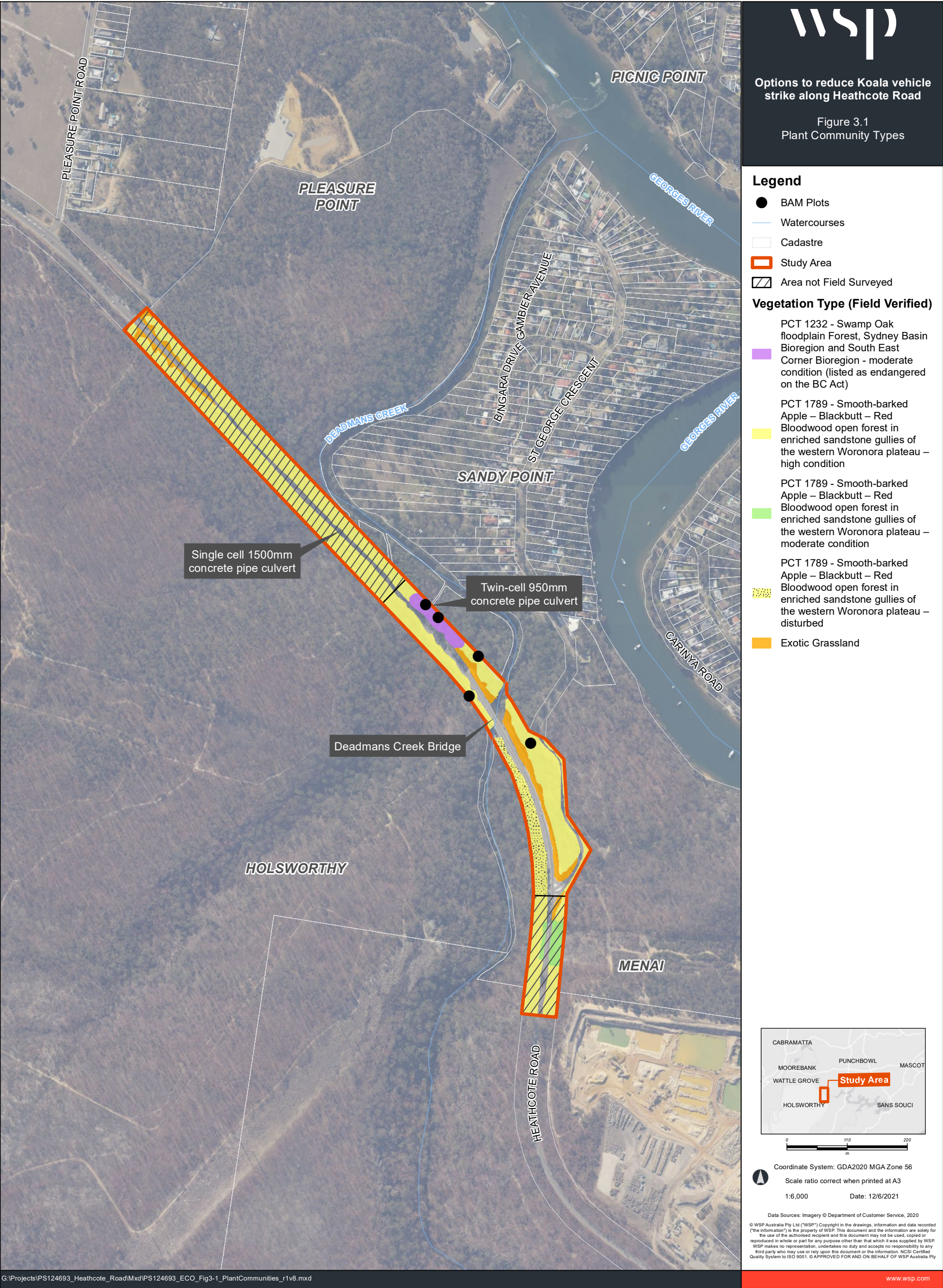
- Miscellaneous ecosystem – Exotic Grassland.

A summary of PCTs and associated vegetation zones are presented in Table 3.2 with the extent and distribution shown in Figure 3.1.

A detailed description of each PCT and justification for assigning the vegetation to each PCT and vegetation zone is provided in Appendix B. The western-most section and a small section in the east of the study area were not fully ground-truthed or subject to BAM plots due to access constraints. The vegetation type and condition in these two areas were extrapolated from the PCTs recorded during the survey and aerial photo interpretation. The areas not fully ground-truthed are shown on Figure 3.1.

Table 3.2 Plant community types

PLANT COMMUNITY TYPE (PCT)	CONDITION CLASS	THREATENED ECOLOGICAL COMMUNITY?	STUDY AREA (HA)
PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau	High	No	6.73
PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau	Moderate	No	0.24
PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion	Moderate	Yes – Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions. Listed as Endangered (BC Act)	0.29
Total extent of native vegetation			7.26
Miscellaneous ecosystem – exotic grassland	n/a	No	0.66
Total extent of non-native vegetation			0.66
Total native and non-native vegetation			7.92



3.3 THREATENED ECOLOGICAL COMMUNITIES

3.3.1 BC ACT THREATENED ECOLOGICAL COMMUNITIES

One threatened ecological community was recorded within the study area: Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions (Swamp Oak Floodplain Forest). This threatened ecological community is listed as endangered under the BC Act. The occurrence of this threatened ecological community within the study area is shown in Table 3.1.

PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion recorded in the study area is consistent with the Swamp Oak Floodplain Forest final determination (NSW Scientific Committee, 2011).

A comparison of the Swamp Oak Floodplain Forest final determination and PCT 1232 attributes within the study area is provided in Table 3.3 below.

Table 3.3 A comparison of Swamp Oak Floodplain Forest final determination criteria and PCT 1232 attributes within the study area

FINAL DETERMINATION LISTING CRITERIA	SWAMP OAK FLOODPLAIN FOREST	PCT 1232 SWAMP OAK FLOODPLAIN FOREST, SYDNEY BASIN BIOREGION AND SOUTH EAST CORNER BIOREGION
Area occupied by the EEC	Occurs in the NSW North Coast, Sydney Basin and South East Corner Bioregions.	The study area occurs in the Sydney Basin Bioregion.
Soils and Landscape position	The community associated with grey-black clay-loams and sandy loams, where the groundwater is saline or sub-saline, on waterlogged or periodically inundated flats, drainage lines, lake margins and estuarine fringes associated with coastal floodplains.	The study area occurs on the coastal floodplain associated with drainage line of Deadmans Creek. The soils are black clay and are regularly inundated by high tides.
Elevation	Does the PCT occur below 20 m in elevation (ASL)?	The PCT occurs at elevations between 10 m and 20 m.
Floristic Structure	The structure of the community may vary from open forests to low woodlands, scrubs or reedlands with scattered trees. Typically, these forests, woodlands, scrubs and reedlands form mosaics with other floodplain forest communities and treeless wetlands, and often they fringe treeless floodplain lagoons or wetlands with semi-permanent standing water.	The PCT within the study area is that of an open forest, with a dense canopy layer. It occurs on a coastal floodplain and is periodically inundated during high tide events.

FINAL DETERMINATION LISTING CRITERIA	SWAMP OAK FLOODPLAIN FOREST	PCT 1232 SWAMP OAK FLOODPLAIN FOREST, SYDNEY BASIN BIOREGION AND SOUTH EAST CORNER BIOREGION
Assemblage of Species	49 characteristic species of Swamp Oak Floodplain Forest are listed in the Scientific Determination.	4 species of the characteristic species were recorded within PCT 1232. Two BAM plots were conducted within this PCT with the area of this PCT being small. The ground layer was absent due to regular inundation reducing the number of species recorded. However, dense stands of <i>Melaleuca styphelioides</i> (Prickly-leaved Paperbark), <i>Melaleuca linariifolia</i> (Snow-in Summer), with <i>Casuarina glauca</i> as a co-dominant canopy species was recorded which is a characteristic of this threatened ecological community.
Location within LGAs	Occurs within one of the LGA's listed in Paragraph 3 of the Scientific determination.	Yes, this PCT occurs within the Liverpool LGA.
Is PCT 1232 commensurate with the threatened ecological community of Swamp Oak Floodplain Forest?		Yes

3.3.1 EPBC ACT THREATENED ECOLOGICAL COMMUNITIES

PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion has the potential to meet the threatened ecological community of Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community listed as endangered on the EPBC Act.

To meet the EPBC Act listing for this endangered ecological community it must meet the key diagnostic characteristics and the condition thresholds outlined in the listing advice.

PCT 1232 meets all the key diagnostic characteristics for the EPBC Act listing (Table 3.4). However, it does not meet the EPBC Act condition thresholds for this endangered community, as the patch size is less than 2 hectares (Table 3.5).

No threatened ecological communities listed on the EPBC Act occur within the study area.

Table 3.4 A comparison of Swamp Oak Forest EPBC Act diagnostic characteristics and PCT 1232 within the study area

KEY DIAGNOSTIC CHARACTERISTICS		PCT 1232 SWAMP OAK FLOODPLAIN FOREST, SYDNEY BASIN BIOREGION AND SOUTH EAST CORNER BIOREGION WITHIN THE STUDY AREA
Area occupied by the EEC	Occurs from south-east Queensland to Southern NSW within the South eastern Queensland, NSW North Coast, Sydney Basin or South East Corner Bioregions.	The study area occurs in the Sydney Basin Bioregion.
Elevation and landscape position	Occurs in coastal catchment at elevations of up to 50 m ASL typically less than 20 m ASL, on coastal flats, floodplains, drainage lines, lake margins, wetlands and estuarine fringes where soils are at least occasionally saturated, water-logged or inundated.	The PCT occurs at elevations between 10 m and 20 m. Occurs on the coastal floodplains associated with the drainage line of Deadmans Creek. The vegetation is regularly inundated by high tides and during high rainfall events
Soils	Occurs on soils derived from unconsolidated sediments (including alluvium), typically hydrosols (grey-black, clay-loam and/or sandy loam soils).	The PCT occurs on soils are black clay
Floristic Structure	Has an open woodland, woodland, forest, or closed forest structure, with tree canopy that has a total crown cover of at least 10%.	The PCT within the study area is that of an open forest, with a dense canopy layer of at least 30%.
Dominant tree species	Has a copy of trees dominated by <i>Casuarina glauca</i> (Swamp-oak)	The canopy is dominated by <i>Casuarina glauca</i> .
Does PCT 1232 meet the key diagnostic characteristics?		Yes

Table 3.5 A comparison of Coastal Swamp Oak (*Casuarina glauca*) Forest against the condition criteria and PCT 1232 attributes within the study area

VEGETATION QUALITY CLASS	PATCH SIZE CLASSES				PCT 1232 SWAMP OAK FLOODPLAIN FOREST, SYDNEY BASIN BIOREGION AND SOUTH EAST CORNER BIOREGION
	Large Patch The patch is at least 5 ha	Medium Patch The patch is at least 2ha and less than 5 ha	Small contiguous patch patch size – At least 0. 5 ha and less than 2 ha, and is connected to a larger area of native vegetation of at least 4 ha	Small Patch The patch is at least 0. 5 ha and less than 2 ha	
High Quality Predominantly native understorey Non-native species comprise less than 20% of total understorey vegetation cover.	CATEGORY A A large patch that meets key diagnostics and has a predominantly native understorey.	CATEGORY B A medium patch that meets key diagnostics and has a predominantly native understorey OR A small patch that meets key diagnostics and has a predominantly native understorey and is contiguous with another large area of native vegetation.		CATEGORY C A small patch that meets key diagnostics and has a predominantly native understorey.	The patch size is 0. 29 ha and does not meet any of the patch size classes. Meets the key diagnostics. Understorey species comprise of 35% native species. Understorey species comprise of 20% non-native species.
Good Quality Mostly native understorey Non-native species comprise of less than 50% of total understorey vegetation cover AND Transformer species comprise of less than 30% of the total understorey vegetation cover.	CATEGORY B A large patch that meets the key diagnostics and has a mostly native understorey.	CATEGORY C A medium patch that meets key diagnostics and has a mostly native understorey OR A small patch that meets key diagnostics and has a mostly native understorey and is contiguous with another large area of native vegetation.			Does not meet large or medium patch sizes. Meets the key diagnostics. Understorey species comprise of 35% native species. Non-native species are at least 20% of total understorey species. Transformer species are 2% of the total understorey species.
Moderate Quality Some native understorey Non-native species comprise of less than 80% of total understorey vegetation cover AND Transformer species comprise of less than 50% of total understorey vegetation cover	CATEGORY C A large or medium patch that meets the key diagnostic criteria and has some native understorey				Same as above.
Is PCT 1232 commensurate with the threatened ecological community of Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest?					No

3.4 COASTAL MANAGEMENT SEPP 2018

Parts of the study area have been mapped as Coastal Management SEPP 2018 as both “coastal wetlands” and “proximity area for Coastal Wetlands” (refer Appendix C). This includes vegetation that occurs on the banks of Deadmans Creek at the bridge over Heathcote Road. A longer patch is mapped in the north-west of the study area on the northern side of Heathcote Road.

Direct impacts on wetlands mapped as ‘Coastal Wetlands’ under the Coastal Management SEPP 2018 would trigger the requirement for assessment under Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as designated development, therefore requiring an Environmental Impact Statement (EIS) and the consent authority is Local Council. The project footprint within these mapped areas would require assessment through the preparation of an EIS and supported by a Biodiversity Development Assessment Report (BDAR) in accordance with BAM. Alternatively, if all areas of ‘Coastal Wetlands’ are avoided and only ‘Proximity Coastal Wetlands’ are impacted, Division 4.1 of the EP&A Act would not be triggered and the preparation of an EIS would not be required. Justification would however be required as part of the Review of Environmental Factors to demonstrate that the project would not have a significant impact on the Coastal Wetlands surrounding the project.

3.5 EXISTING ROAD INFRASTRUCTURE

Heathcote Road is a two-lane arterial road that connects the M5 Motorway, near Moorebank in the west and the Princes Highway, near Heathcote to the east. In the study area, Heathcote Road is bordered by extensive vegetated areas of Defence land and National Park to the south, and Georges River National Park, council reserves, residential developments and the Georges River to the north. The current speed limit for this section of Heathcote Road is 80 kilometres per hour.

The existing infrastructure along this section of Heathcote Road includes a concrete bridge, concrete pipe culverts and several stretches of ‘W’-beam safety barriers (refer Figure 4.1).

The central section of the study area contains the Deadmans Creek Bridge which crosses the tidally influenced Deadmans Creek. It is a multi-span concrete bridge and provides some fauna connectivity under Heathcote Road. Camera traps placed under the bridge in March 2021 have shown use of the bridge underpass by Deer, Eastern Grey Kangaroos, Swamp Wallabies, Red-necked Wallabies, Foxes and Black Rats. However, the connectivity for the koala underneath the bridge is limited by the amount of scour protection on the creek banks which reduces its suitability for the species.



Photo 3.1 The multi-span concrete bridge that crosses Deadmans Creek (L) and the rip-rap scour protection that surrounds the bridge abutments and creek banks (R)

About 200 metres to the north-west of Deadmans Creek Bridge is a twin-cell 950 mm diameter concrete pipe drainage culvert that crosses under Heathcote Road. This is in the low-lying section of the study area and connects to Deadmans Creek in the north. It is tidally influenced, usually contains water and forms part of the “coastal wetlands” and “proximity area for Coastal Wetlands” under the Coastal Management SEPP 2018. Fauna connectivity for terrestrial species in this location is limited due to the tidal presence of water in the culverts and relatively small culvert size (950mm) which many terrestrial species will avoid because it is too wet and dark. The vegetation in this location is Swamp Oak Floodplain Forest (EEC, BC Act), which is more extensive on the north-eastern side of Heathcote Road.



Photo 3.2 The twin-cell concrete pipe drainage culvert that crosses underneath Heathcote Road. The northern cell contains water most of the time (L) while the southern cell typically contains less water (R)

About 470 metres to the north-west of Deadmans Creek Bridge is a reinforced single-cell 1500 mm diameter concrete pipe drainage culvert that crosses under Heathcote Road, connecting Defence land. This is the beginning of the elevated section of the study area and connects to the bend in Deadmans Creek to the north. Due to the gentle slope and elevation, it contains less water than the culverts closer to the bridge and is likely dry most of the time. Fauna connectivity for terrestrial species in this location is moderate but somewhat limited by the relatively small size and darkness of the culvert. The vegetation in this location is sandstone enriched dry sclerophyll forest with the canopy dominated by *Eucalyptus pilularis* (Blackbutt), *Eucalyptus punctata* (Grey Gum) and *Angophora costata* (Smooth-barked Apple).



Photo 3.3 Single-cell concrete pipe drainage culvert that crosses under Heathcote Road on the northern side (L) and connects to Defence land on the southern side (R). 'W'-beam safety barrier is also present in this section of the study area

There are two types of fences that run along the boundary of Defence land adjacent to the road reserve of Heathcote Road:

- 5-strand barbed wire stock fencing
- 1.8 metre-high chain link with 400 mm of 3-strand barbed wire ‘controlled access fencing’.

The 5-strand barbed wire fence runs in a north-westerly direction from Deadmans Creek bridge for about 260 metres on Defence land on the southern side of Heathcote Road and runs parallel to the road.

The 2.2 metre high controlled access fencing is set back from the road shoulder by about 30 metres and is installed on Defence land at the road boundary edge. On the southern side of Heathcote Road, the fence runs in a westerly direction for about 2 kilometres (toward the Holsworthy Defence Base) starting about 500 metres west of Deadmans Creek Bridge on Defence land, on top of the rock escarpment. At the time of writing, new sections of controlled access fencing have been installed on Defence land on the southern side of Heathcote Road from near the outlet of the single concrete pipe culvert to the next section between the two culverts.

On the northern side of Heathcote Road, the controlled access fencing starts about 100 metres from the creek bank of Deadmans Creek and runs in a westerly direction on Defence land for about 700 metres to Pleasure Point Road.

The extent, type and condition of this fence means it would be somewhat effective in preventing fauna from accessing Heathcote Road, but it would need to be retrofitted with 600mm wide metal sheet panels at the top of the fence to prevent koalas from climbing over and ground mesh pegged out to prevent animals getting under gaps. However, there are several large breaks in the fencing on the northern and southern sides of Heathcote Road, near the single cell pipe culvert that could provide egress out of Defence land and into the road corridor for the koala and other wildlife.

3.6 IMPORTANCE OF KOALA HABITAT AND CONNECTIVITY

Very few formal studies of the koala population or their movements in this area have been undertaken, however the number of koala records in the area, including koala roadkill, combined with the presence of preferred feed trees, strongly indicates the study area provides important habitat for the conservation of koalas.

Local evidence shows koalas are killed by vehicle strike on Heathcote Road, particularly near Deadmans Creek. The site was not identified in a 2019 TfNSW statewide analysis of koala vehicle strike hotspots. The southern Sydney branch of the National Parks Association have submitted information to DPIE and TfNSW that shows the site is likely a local priority and is of concern to local environmental community groups.

Close (2019) reports the longest dispersal route of a young, tagged female koala, Wilhelmina, who travelled north from Campbelltown, across the Defence Firing range to Heathcote for a distance of about 20 kilometres. Male koalas generally travel further than females, especially when dispersing from their mother.

Dispersal distances of male koalas from the Campbelltown population to the north towards Heathcote and the George’s River ranged from 14 – 19 kilometres (Close, 2019). Recently, the median female koala home range in this locality has been estimated at 34 hectares with a density of 0.052 – 0.056 koalas per hectare (S Phillips, personal communication, 14 May 2021).

Close (2019) states the long-term survival of the Campbelltown koalas depends on preserving habitat and maintaining dispersal routes. The Holsworthy Defence land would be considered an important dispersal route for this population as it allows for north-south movement of koalas to large areas of habitat.

Vegetation within the study area is dominated by a canopy of Blackbutt (*Eucalyptus pilularis*), Grey Gum (*Eucalyptus punctata*) and Smooth-barked Apple (*Angophora costata*). Schedule 2 of the Koala Habitat Protection SEPP (2021) lists Smooth-barked Apple and Blackbutts as a ‘use tree’ in the Central Coast Management area. However, Grey Gum is the preferred koala food tree (PFKT) species in PCT’s within the study area and locality and can be used as an indicator of transition soils and likely koala presence (Phillips and Callaghan, 2011). Blackbutts may be opportunistically browsed and sat in, but they are not preferentially used (S Phillips, personal communication, 14 May 2021).

The Koala Habitat Protection SEPP (2021) defines core koala habitat as:

- a an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas are recorded as being present at the time of assessment of the land as highly suitable koala habitat, or
- b an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas have been recorded as being present in the previous 18 years.

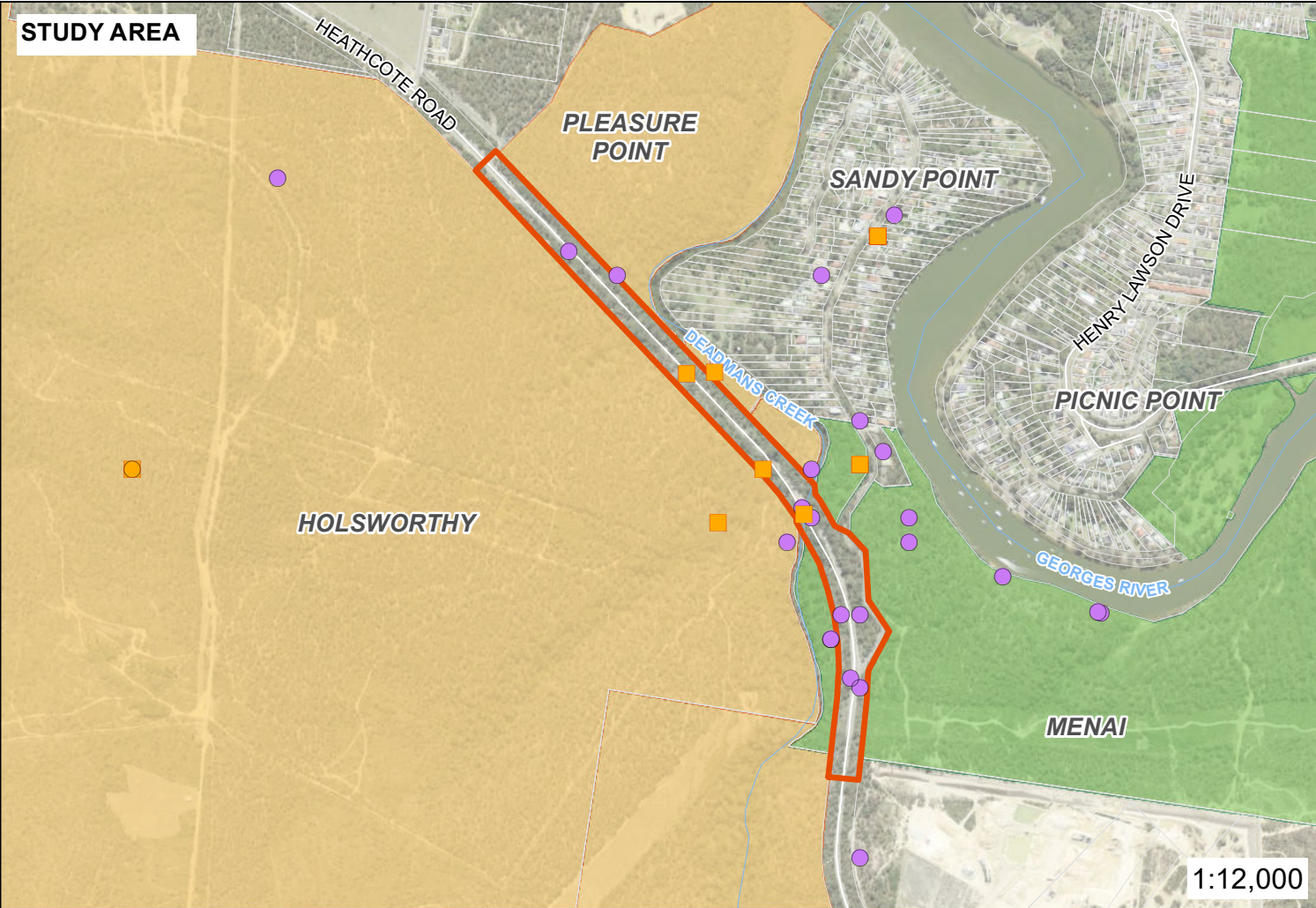
No specific koala surveys were undertaken as part of this study, and the vegetation in areas not surveyed was extrapolated based on mapping in the Native Vegetation of the Sydney Metropolitan Area (OEH, 2013).

Vegetated areas within the study area and the locality that contain the following PCT's is likely to be considered 'core koala habitat' under the Koala Habitat Protection SEPP (2021):

- PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau.
- PCT 1790 Red Bloodwood - Grey Gum - Stringybark open forest on enriched sandstone ridges of the western Woronora plateau and lower Blue Mountains.
- PCT 1776 – Smooth-barked Apple – Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast.
- PCT 1785 – Smooth-barked Apple - Sydney Peppermint - Blackbutt tall open forest on enriched sandstones around Helensburgh.

While specific data on actual movement patterns within the study area is relatively scant and is dependent on a handful of tagged individuals, based on our knowledge of the area and our experience in koala behavioural ecology, we consider it highly likely that koalas are using the extensive Holsworthy Defence land for dispersal.

Sandy Point Residents have recorded koalas in Grey Gums in the Sandy Point Reserve car park and the BioNet Atlas includes records of observations of koalas in Grey Gums and to a lesser extent, Blackbutts.



Options to reduce Koala vehicle strike along Heathcote Road

Figure 3.2
Koala records

Legend

- Koala records in the locality
- Koala Vehicle Strike Records
- Watercourses
- Cadastre
- Study Area
- Study Area 10km Buffer
- NPWS Reserve
- Defence Area

Coordinate System: GDA2020 MGA Zone 56

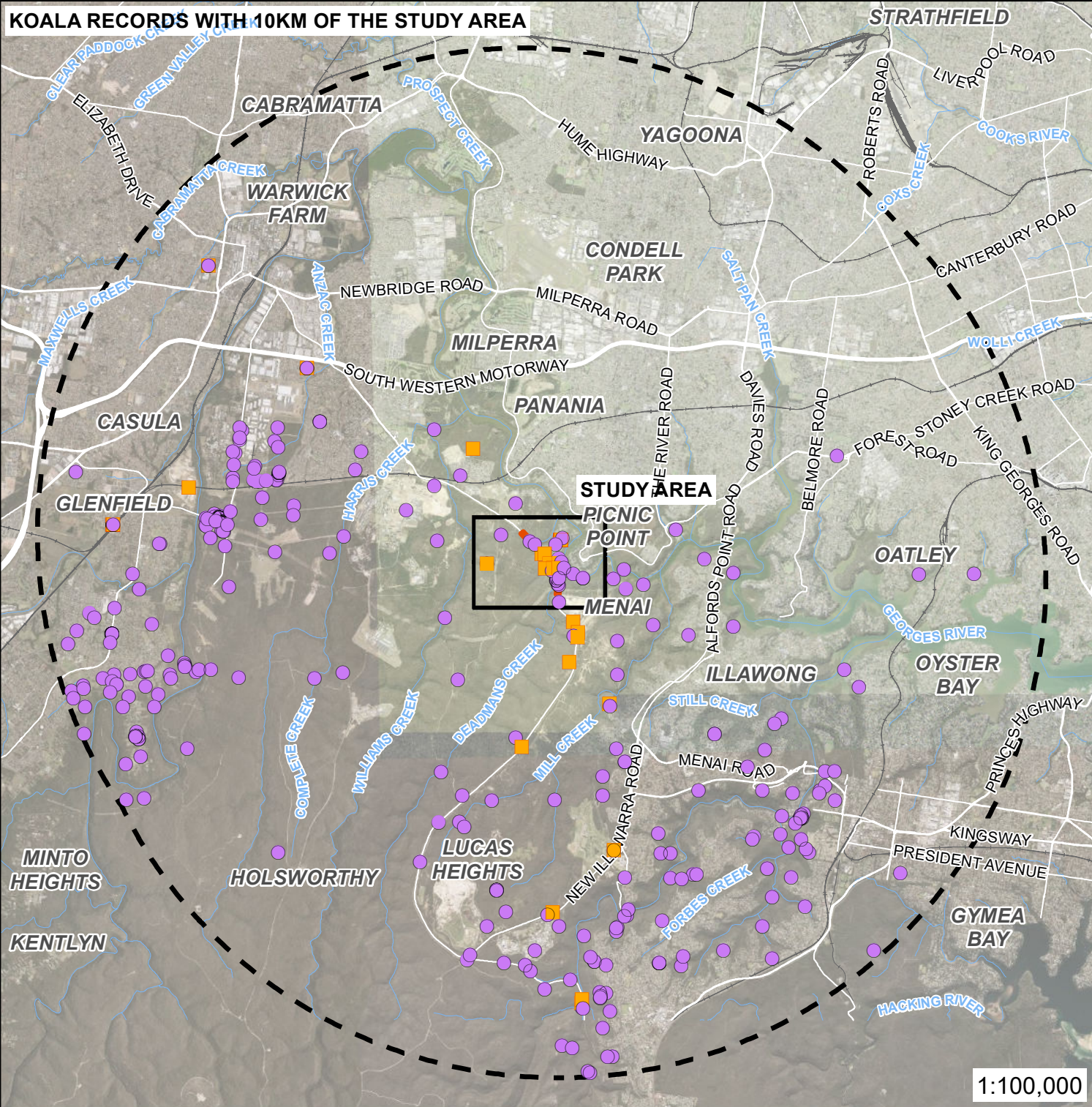
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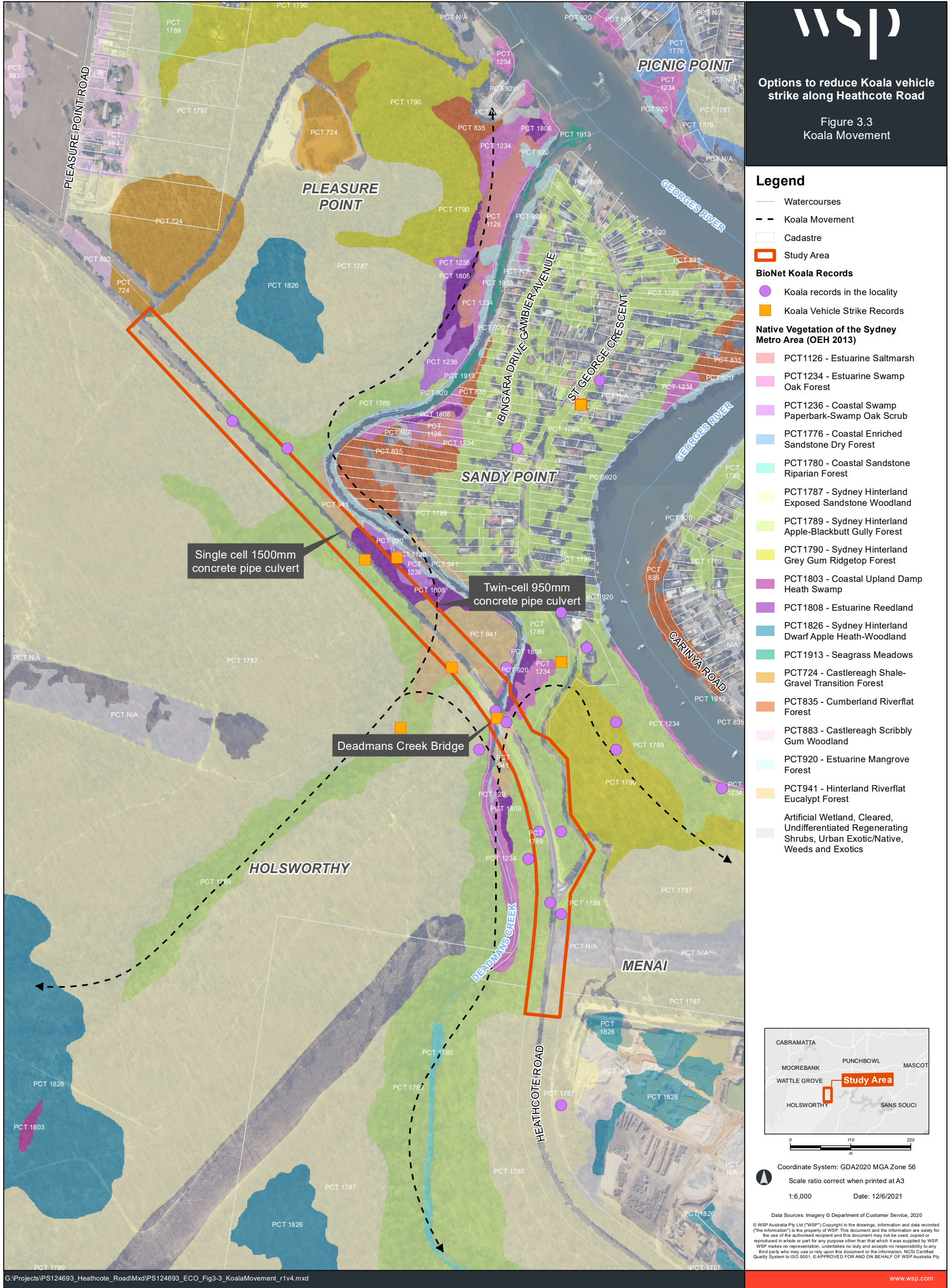
1:100,000 Date: 12/6/2021

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4 MITIGATION OPTIONS ASSESSMENT

4.1 OPTIONS DEVELOPMENT

Options for reducing koala vehicle-strike along Heathcote were developed using a landscape-scale approach and based on proven mitigation measures, topography, location of potential crossing structures, known koala roadkill hotspots, predicted koala movement corridors, location of core koala habitat and engineering and environmental considerations.

Information collected during the desktop assessment and one day field survey was used in the development of the mitigation options and their assessment.

The following mitigation options for reducing koala vehicle-strike along Heathcote were developed and are shown on Figure 4.1:

- **Option 1:** Fencing the road reserve of Heathcote Road along the entire road reserve (including fencing above the rock cutting near St George Crescent), improving the conditions of the Deadmans Creek bridge underpass and installing a koala grid on St George Crescent.
- **Option 2:** Install shorter lengths of fauna fence along the road reserve of Heathcote Road (north-west of the bridge) and utilising existing Defence fence (some of which may need to be modified), improving the conditions of the Deadmans Creek bridge underpass and installing a koala grid on St George Crescent.
- **Option 3:** Install shorter lengths of fauna fence along the road reserve of Heathcote Road to avoid impacts to land mapped as coastal wetlands under the Coastal Management SEPP 2018.
- **Option 4:** Extension of fencing along Heathcote Rd up to the Quarry entrance. This can be applied to any of the options and where appropriate, existing Defence fencing would be used (some of which may need to be modified).

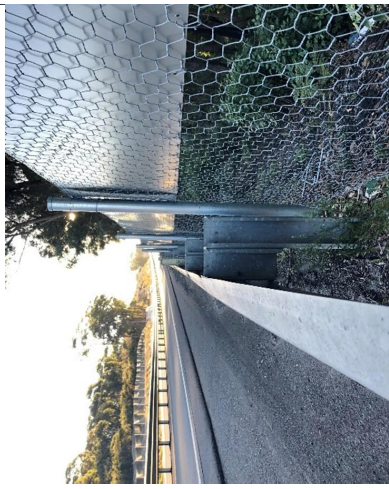
4.2 DESCRIPTION OF OPTIONS


The feasible options for reducing koala vehicle-strike along Heathcote Rd are limited to proven mitigation measures such as the installation of fauna fencing and improving the conditions of the existing bridge over Deadmans Creek. Other potential options such as rumble strips, activated signage, flashing lights/static signage and pavement painting were investigated but not considered further as they are not proven mitigation measures to reduce koala vehicle-strike.


The main differences in the four proposed options relate to the length and location of fauna fencing proposed and how and where the fence ends are treated. The length of fencing is based on minimum requirements to effectively funnel koalas towards Deadmans Creek Bridge, in relation to koala records within the vicinity.


Potential mitigation options are detailed further in Table 4.1 and presented in Figure 4.1.

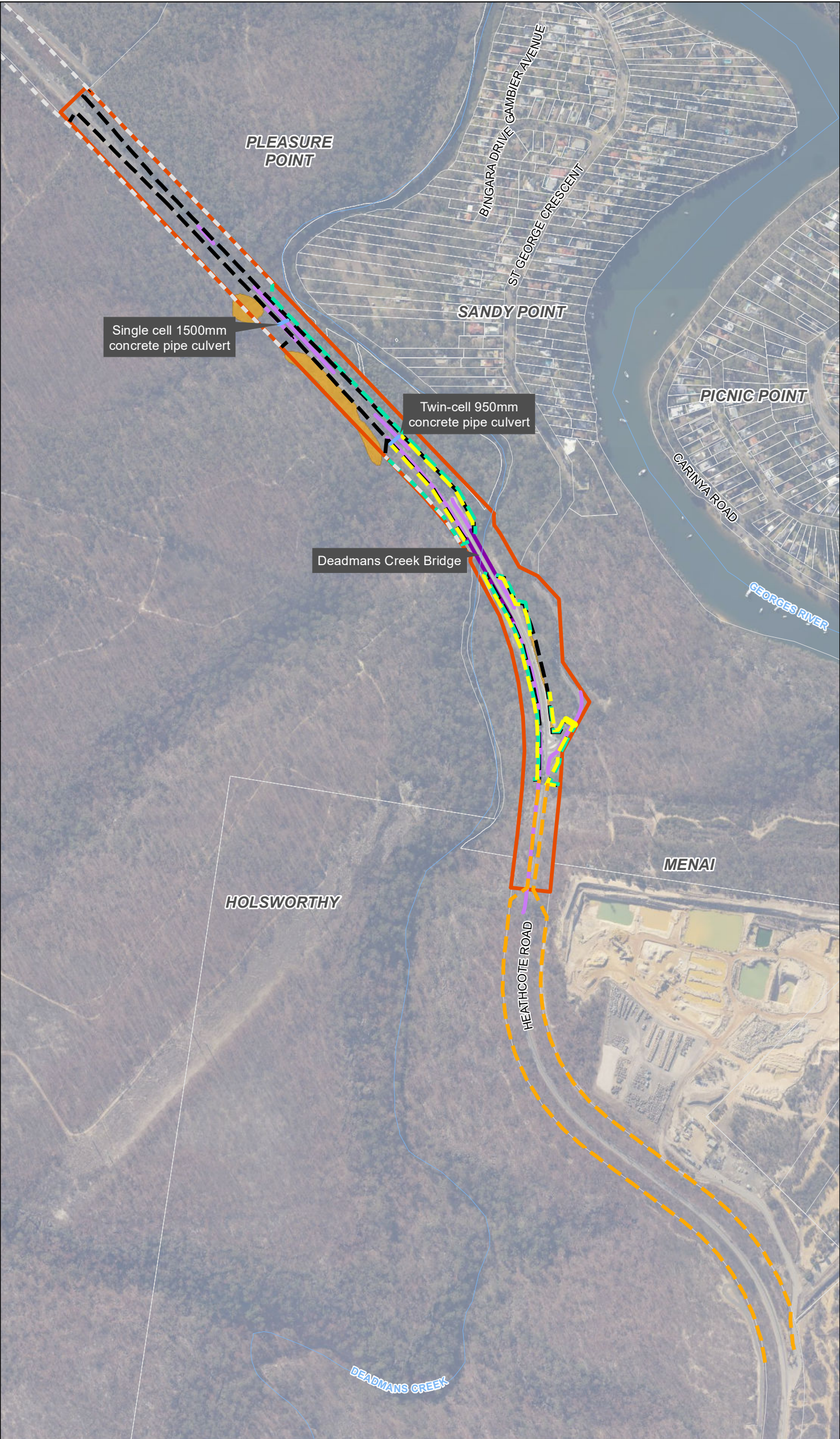
Table 4.1 Summary of mitigation options feasibility assessment

OPTION 1 – FENCE ROAD RESERVE OF HEATHCOTE ROAD ALONG ENTIRE STUDY AREA	PHOTOS
<p>Option 1 description:</p> <ul style="list-style-type: none"> — Install fauna fence both sides of Heathcote Rd road reserve adjacent to existing Defence fence from the bridge abutments to local access road near Pleasure Point and to St George Crescent (including fencing above the rock cutting near St George Crescent) — Tie in with existing 'W' beam safety barrier to go above the culverts — Install 'koala grid' on St George Crescent and tie in fauna fence to grid — Improve connectivity for koalas under Deadmans Creek Bridge: <ul style="list-style-type: none"> — infill existing rip-rap near bridge abutments with finer rocks, or retrofit with shotcrete, concrete or geo-fab — install concrete or timber ledge (min 1 m wide) under eastern side of bridge span — install predator refuge pole on bridge approaches. <p>Constructability:</p> <ul style="list-style-type: none"> — Rock face treatment may be considered by TTNW in steep, rocky areas to prevent koalas coming down tracks between rocks. — No crossing of creeks required as fencing would be installed above the W-beam safety rail and culvert headwalls. <p>Fencing cost: 2.8 kilometres @ \$100 p/m = approximately \$280,000 (not including geo-tech, surveyors, clearing contractors if required, other investigations)</p> <p>Extent of clearing: The removal of approximately 1.68 hectares of native vegetation would be required to achieve a 3 metre buffer either side of the new fence.</p> <p>Maintenance requirements: Can implement TTNW Routine Maintenance specification</p> <p>Land tenure: TTNW single tenure.</p> <p>Effectiveness: Long, uninterrupted sections of fauna fencing are most effective when used in conjunction with crossing structures such as bridges.</p> <p>Ecological considerations:</p> <ul style="list-style-type: none"> — There is potential for fauna to be trapped between the new fence and the existing Defence fencing. This would be minimised through the placement of tie-ins and if required, escape mechanisms. — Minimises direct impacts to Coastal SEPP areas. 	 <p>Photo 4.1 Example fauna fence for Koalas installed behind 'W' beam safety barrier on Picton Road</p>

OPTION 2 – INSTALL SHORTER SECTIONS OF FAUNA FENCE AND TIE INTO DEFENCE FENCE	PHOTOS
<p>Option 2 description:</p> <ul style="list-style-type: none"> — Install fauna fence both sides of Heathcote Rd road reserve for ~ 600 metres from the bridge abutments to existing Defence fencing and to St George Crescent (tie in fencing to the rock cutting near St George Crescent) — A section of Defence fencing (~260 metres) would need to be replaced or modified (while meeting Defence controlled access fencing requirements) along its current alignment. — Option 2 fencing then cuts back into the road reserve to avoid fencing in the creek, and then ties back into the new Defence fencing. — Tie in with existing 'W' beam safety barrier to go above the culverts — Tie into bridge abutment and recently installed Defence fence — Install 'koala grid' on St George Crescent and tie in fauna fence to grid — Improve connectivity for koalas under Deadmans Creek Bridge: <ul style="list-style-type: none"> — infill existing rip-rap near bridge abutments with finer rocks, or retrofit with shotcrete, concrete or geo-fab — install concrete or timber ledge (min 1m wide) under eastern side of bridge span — install predator refuge pole on bridge approaches. <p>Constructability:</p> <ul style="list-style-type: none"> — Rock face treatment may be considered by TfNSW in steep, rocky areas to prevent koalas coming down tracks between rocks. — No crossing of creeks required as fencing would be installed above the W-beam safety rail and culvert headwalls — Tie fencing into rock cuttings or equivalent geographical barrier — Gaps under fencing may not be able to be filled in — Sections of Defence fencing to be modified to prevent koala egress (north-western section of study area). This may include metal sheeting and ground mesh. <p>Fencing cost: 1.5 kilometres @ \$100 p/m = approximately \$150,000 + ~300 metres of metal panels (for modifying sections of Defence fence) @\$30 p/m = \$9,000. Approximate total for Option 2 = \$160,000 (not including geo-tech, surveyors, clearing contractors if required, other investigations)</p> <p>Extent of clearing: The removal of approximately 1.04 hectares of native vegetation would be required to achieve a 3 metre buffer either side of the new fence.</p> <p>Maintenance requirements: Will require consultation with Defence</p> <p>Land tenure: TfNSW and Defence tenure</p> <p>Effectiveness: Long, uninterrupted sections of fauna fencing are most effective when used in conjunction with crossing structures such as bridges.</p> <p>Ecological consideration: Minimises direct impacts to Coastal SEPP areas</p>	 <p>Photo 4.2 Newly installed Defence fence at Deadmans Creek. This may require modification or replacement for Option 2 to be effective. Image courtesy of TfNSW</p>

OPTION 3 - INSTALL SHORTER SECTIONS OF FAUNA FENCE	PHOTOS
<p>Option 3 description:</p> <ul style="list-style-type: none"> — Install shorter sections of fauna fence both sides along Heathcote Rd road reserve adjacent to existing Defence fence for ~ 200 metres from the bridge abutments to the twin cell culverts and ~ 300 metres to St George Crescent (tie in fencing to the rock cutting near St George Crescent) — Tie into bridge abutments — Install 'koala grid' on St George Crescent and tie in fauna fence to grid — Improve connectivity for koalas under Deadmans Creek Bridge: <ul style="list-style-type: none"> — infill existing rip-rap near bridge abutments with finer rocks, or retrofit with shotcrete, concrete or geo-fab — install concrete or timber ledge (min 1m wide) under eastern side of bridge span — install predator refuge pole on bridge approaches. <p>Constructability:</p> <ul style="list-style-type: none"> — Tie fencing into rock cuttings or equivalent geographical barrier. — No creek crossing required as fence stops at the first crossing point. <p>Fencing cost: 1.1 kilometres @ \$100 p/m = approximately \$110,000 (not including geo-tech, surveyors, clearing contractors if required, other investigations)</p> <p>Extent of clearing: The removal of approximately 0.67 hectares of native vegetation would be required to achieve a 3 metre buffer either side of the new fence.</p> <p>Maintenance requirements: Can implement TfNSW Routine Maintenance specification</p> <p>Land tenure: TfNSW single tenure</p> <p>Effectiveness: Less ecologically effective as shorter sections of fence are not as effective as longer sections.</p> <p>Ecological consideration: Minimises direct impacts to Coastal SEPP areas.</p>	 <p>Photo 4.3 View of Heathcote Road from Defence land about 200m north-west of Deadmans Creek Bridge. This area is mapped as both "coastal wetlands" and "proximity area for Coastal Wetlands". Fencing to this location will minimise impacts to the Coastal Wetland mapped areas but will be less ecologically effective</p>

OPTION 4 – EXTENSION OF FENCING	PHOTOS
<p>Option 4 description:</p> <ul style="list-style-type: none"> — Extension of fencing along Heathcote Road up to the Quarry entrance. — This can be applied to any of the options and if applied to Option 2, Defence fencing would be used (some of which may need to be replaced or modified (while meeting Defence controlled access fencing requirements) along its current alignment). <p>Constructability: Tie fencing into rock cuttings or equivalent geographical barrier</p> <p>Fencing cost: 2.2 kilometres @ \$100 p/m = approximately \$220,000 (not including geo-tech, surveyors, clearing contractors if required, other investigations or the other costs required by the relevant Option this is applied to).</p> <p>Extent of clearing: The removal of approximately 1.33 hectares of native vegetation would be required to achieve a 3 metre buffer either side of the new fence. This in addition to the vegetation removal required by the relevant Option this is applied to.</p> <p>Maintenance requirements: Can implement TfNSW Routine Maintenance specification if applied with Option 1 or Option 3.</p> <p>Land tenure: If applied with Option 1 and Option 3 = TfNSW and Quarry tenure and if applied with Option 2 = TfNSW, Defence and Quarry tenure.</p> <p>Effectiveness: Long, uninterrupted sections of fauna fencing are most effective when used in conjunction with crossing structures such as bridges.</p> <p>Ecological consideration: Minimises direct impacts to Coastal SEPP areas.</p>	 <p>Photo 4.4 View of Quarry entrance</p>



Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Watercourses
- Culverts
- Defence Fencing
- Koala Grid
- Option 1 - indicative location
- Option 2 - indicative location
- Option 3 - indicative location
- Option 4 - indicative location (extension can be applied to all the options)
- Bridge concrete barrier
- W-beam
- Cadastre
- Study Area
- Steep rocky areas

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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

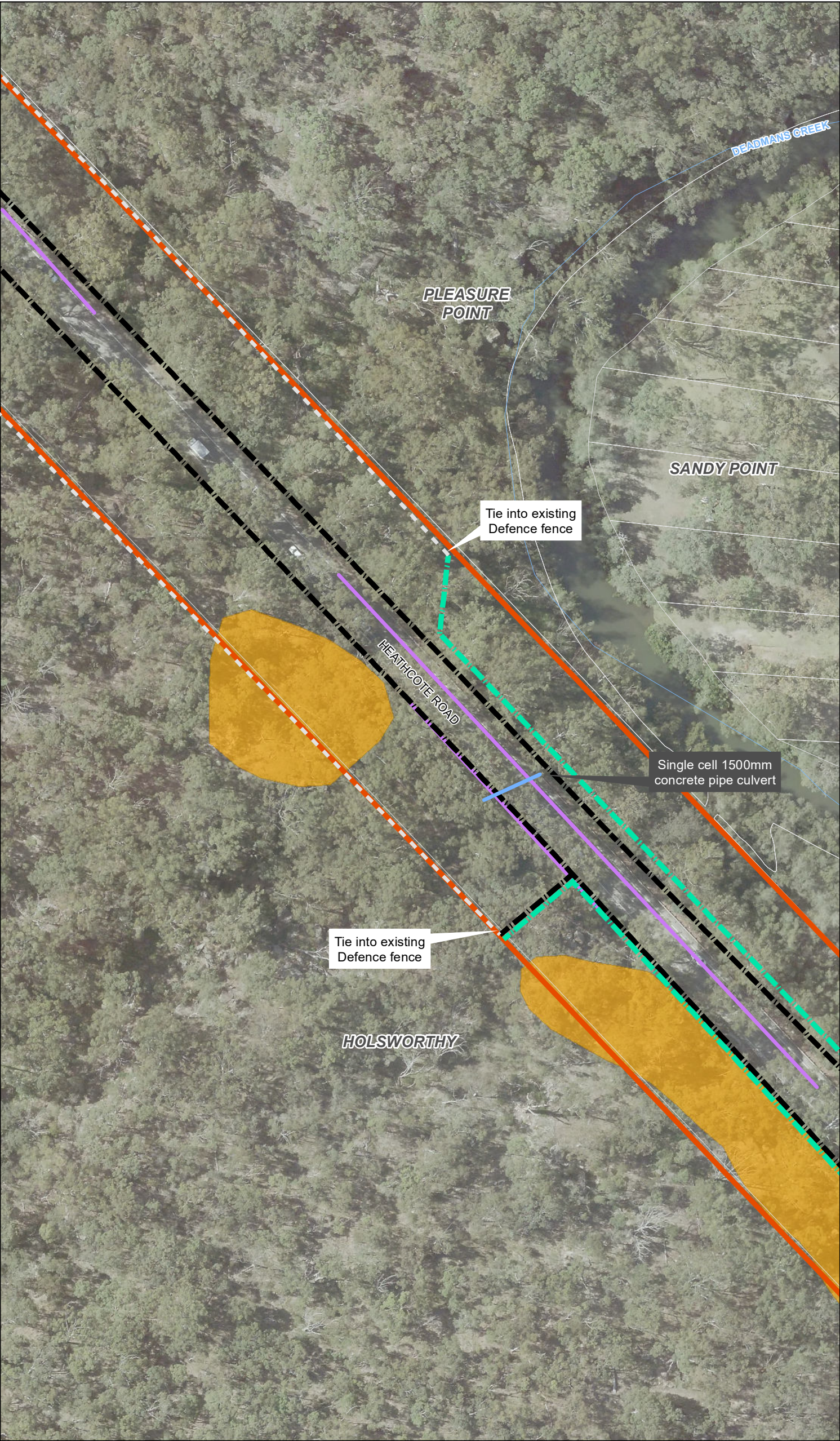
- Defence Fencing
- Option 1 - indicative location
- Study Area
- Cadastre

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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Defence Fencing
- Option 1 - indicative location
- Option 2 - indicative location
- Culverts
- Watercourses
- Study Area
- Cadastre
- Steep rocky areas

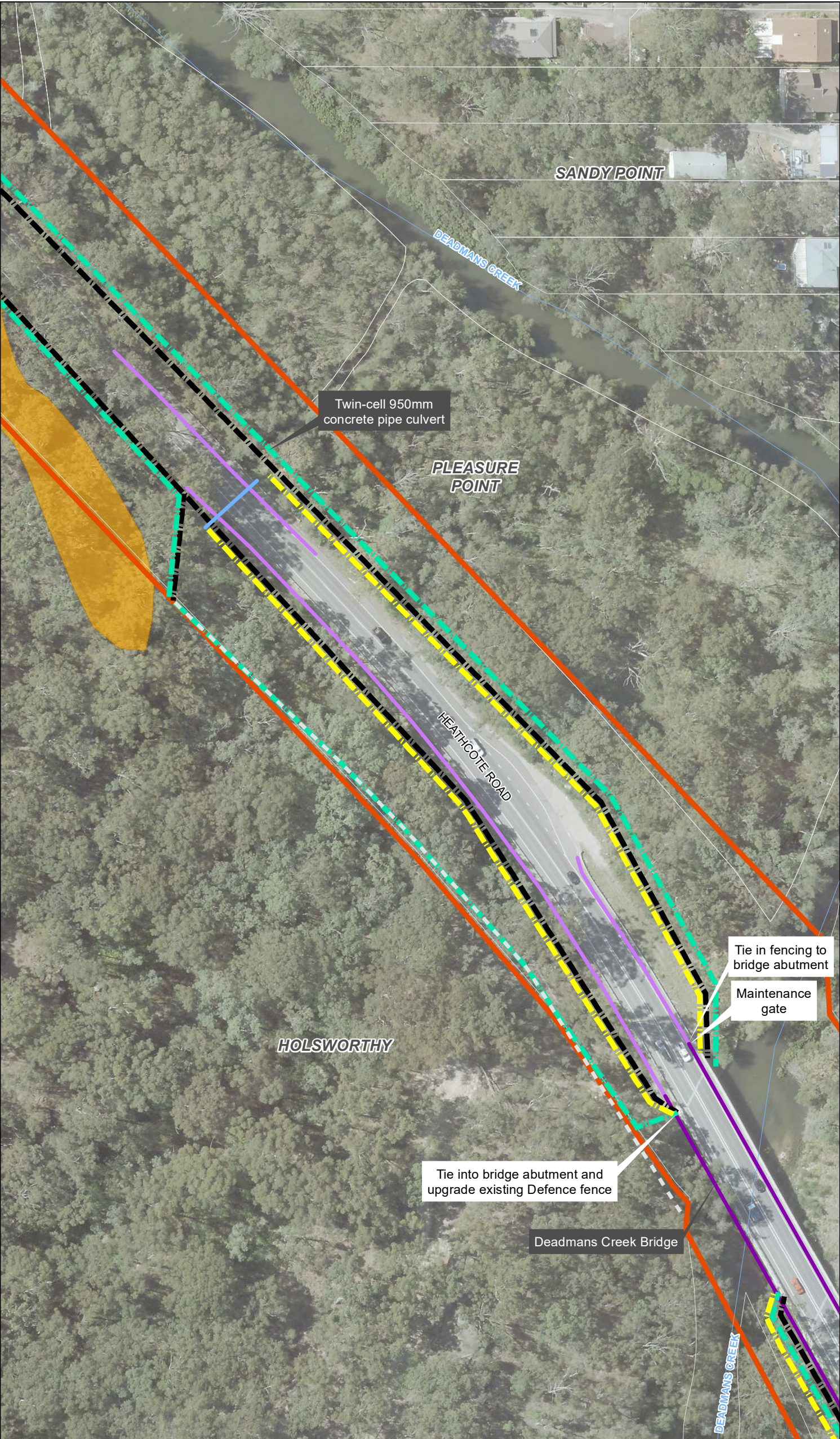
Existing fencing

- W-beam

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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Defence Fencing
- Option 1 - indicative location
- Option 2 - indicative location
- Option 3 - indicative location
- Culverts
- Watercourses
- Study Area
- Cadastre
- Steep rocky areas

Existing fencing

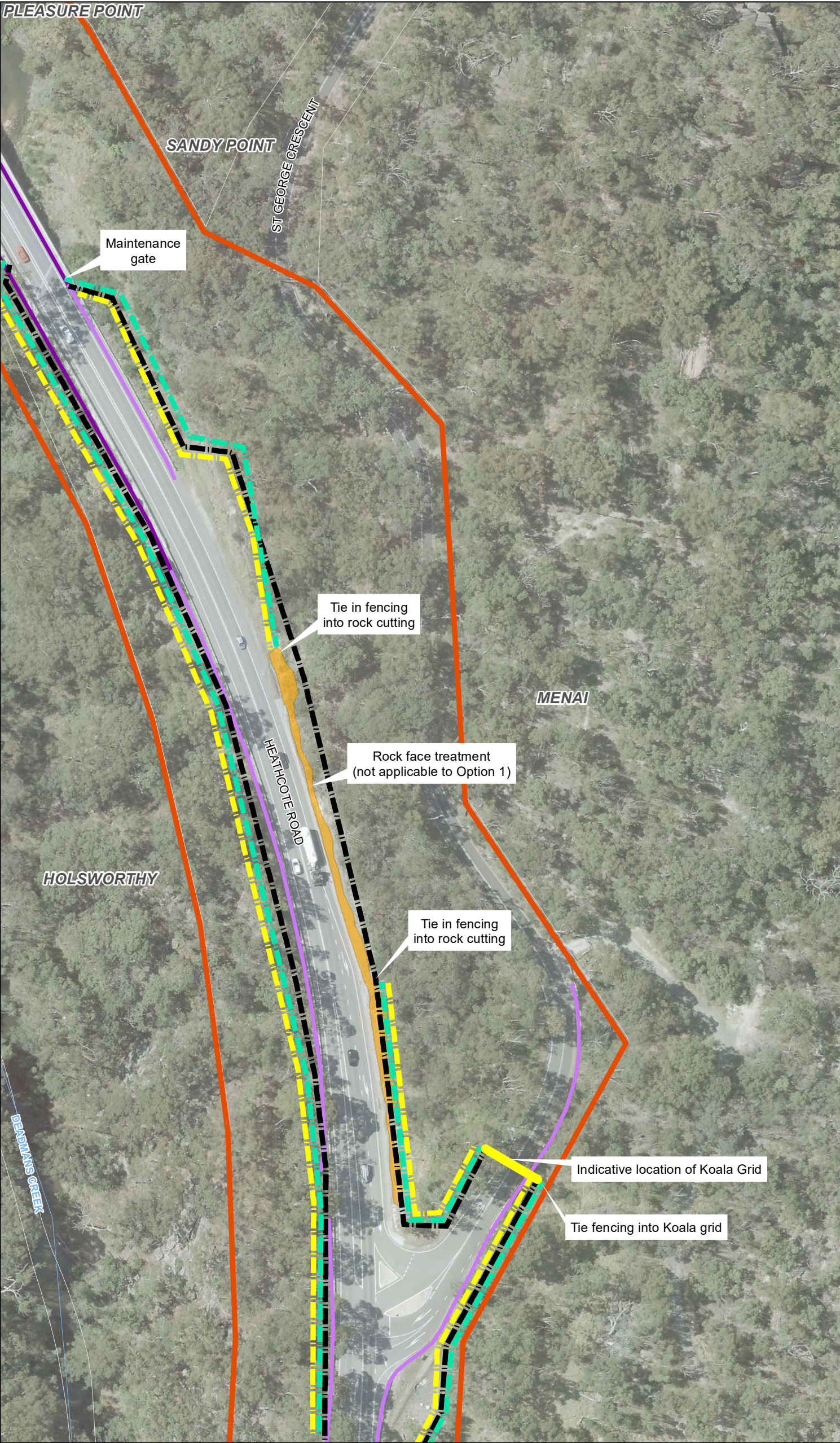
- Bridge concrete barrier
- W-beam

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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Koala Grid
- Option 1 - indicative location
- Option 2 - indicative location
- Option 3 - indicative location
- Watercourses
- Study Area
- Cadastre
- Steep rocky areas

Existing fencing

- Bridge concrete barrier
- W-beam

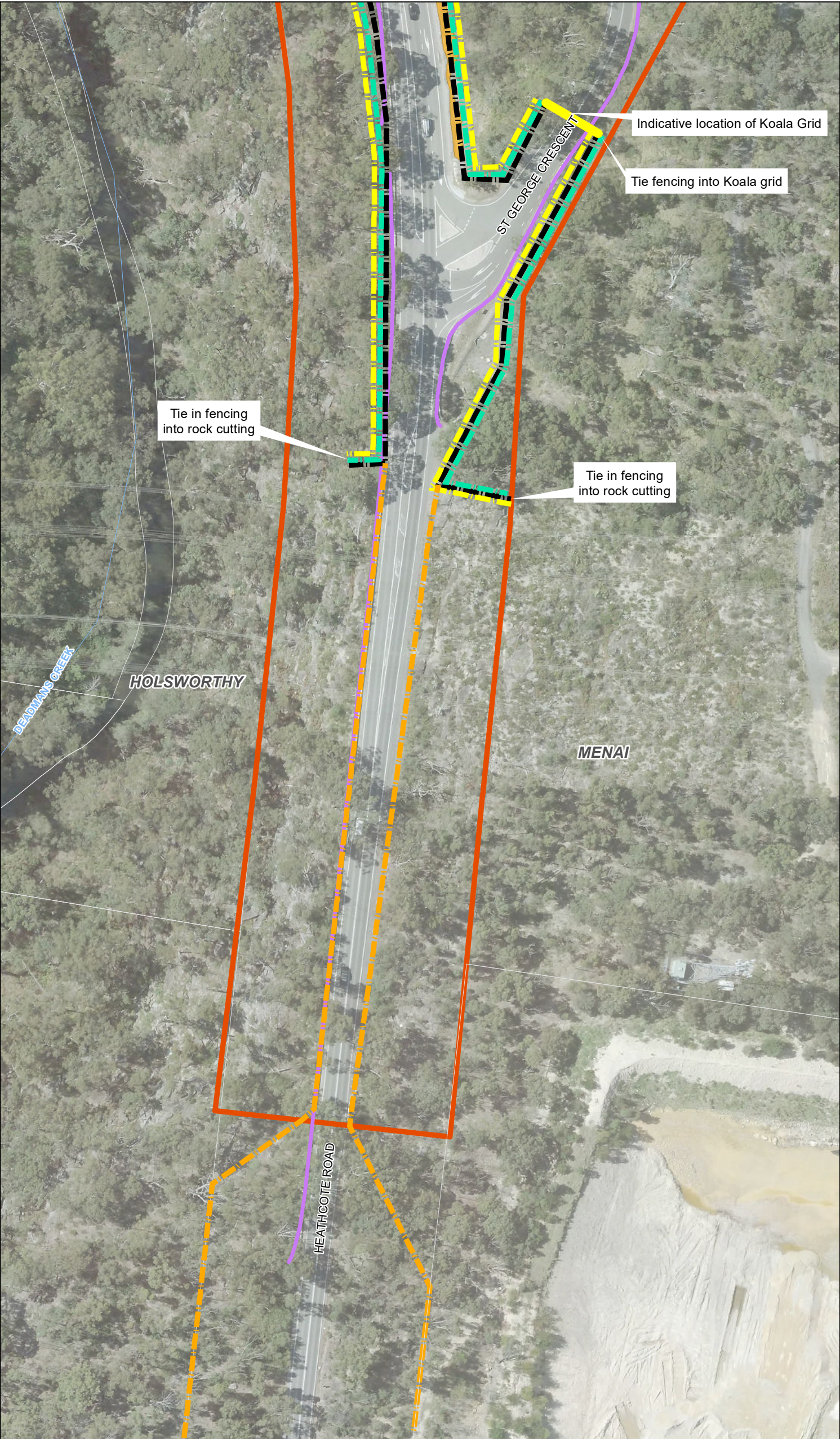
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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Koala Grid
- Option 1 - indicative location
- Option 2 - indicative location
- Option 3 - indicative location
- Option 4 - indicative location (extension can be applied to all the options)
- Watercourses
- Study Area
- Cadastre
- Steep rocky areas
- Existing fencing
- W-beam

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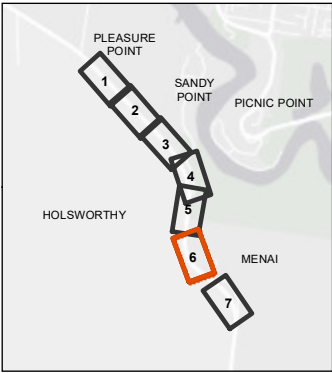


Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

- Option 4 - indicative location (extension can be applied to all the options)
- Watercourses
- Study Area
- Cadastrate
- Existing fencing
- W-beam



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Options to reduce Koala vehicle strike along Heathcote Road

Figure 4.1
Options to reduce Koala Vehicle Strike

Legend

-  Option 4 - indicative location (extension can be applied to all the options)
-  Cadastre

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4.3 OPTIONS ASSESSMENT

The feasibility of each potential mitigation option has been assessed following the criteria in Table 4.2 below.

Table 4.2 Criteria used to assess the feasibility of potential mitigation options to reduce koala vehicle strike

CRITERIA	DESCRIPTION	CLASSIFICATION	SCORE
Relative constructability	How easy is it to construct?	Easy to construct	2
		Hard to construct	1
Relative cost	What is the cost including design, construction and maintenance?	Low cost	2
		High cost	1
Extent of habitat clearing	How much native vegetation needs to be cleared?	< 1 ha clearing	2
		> 1 ha clearing	1
Relative maintenance requirements	How expensive or difficult is it to maintain?	Easy to maintain	2
		Hard to maintain	1
Land tenure	Is the land under single or multiple jurisdiction?	Single jurisdiction	2
		Multiple jurisdiction	1
Effectiveness	Is it proven to be effective for reducing koala vehicle strike?	Effective	2
		Not proven	1

Table 4.3 Summary assessment of mitigation options

FEASIBILITY CRITERIA	OPTION 1	OPTION 2	OPTION 3	OPTION 4*
Constructability	2	2	2	2
Cost	1	2	1	2
Extent of clearing	1	2	2	1
Maintenance	2	2	2	2
Land tenure	2	1	2	1
Ecological effectiveness	2	2	1	2
Total score	10	11	10	10

*Criteria for Option 4 are assessed on the extension of the fencing only. The total score is subject to change depending on which other Option it is applied to.

4.4 DESIGN CONSIDERATIONS

4.4.1 FAUNA FENCING

The most effective method to reduce rates of WVC of terrestrial wildlife is to install appropriate fencing that prevents them from accessing the roadway. A recent review of the international scientific literature showed that fencing that is correctly designed can reduce rates of mortality by an average of approximately 50%, and up to almost 100% in some situations (Rytwinski et al. 2016). Fencing that is effective at reducing rates of WVC and wildlife mortality necessarily increase the barrier effect of the road because they are designed to keep animals off the road. Therefore, fencing is typically recommended where crossing structures can also be installed.

Fencing is used to reduce the rate of WVC by preventing wildlife from entering the roadway and to increase landscape connectivity by funneling wildlife towards the crossing structures (Rytwinski et al. 2016).

The length of fencing at a crossing structure will depend on the extent of habitat in the area, the movement patterns of the target species and occurrence of other roadway access points for vehicles. Fence ends need a specific treatment, and where possible, should be angled back into the habitat to encourage wildlife to turn back, rather than simply have them move around the fence end and onto the roadway. Ensure fencing is strongly and tightly attached to each crossing structure so that animals are unable to squeeze between the fence and (for example) the abutment walls.

Other important considerations include fence height, mesh size and whether the fence needs to be buried to prevent burrowing animals such as wombats from digging underneath it. Fencing for species that climb (e. g. koalas) may need a band of sheet metal at the top that prevents them from climbing over. Inevitably, fencing along roads will need breaks in it to allow vehicles to access the road, such as at intersecting roads or property access points. Where these occur, effort must be made to prevent animals from accessing the road, such as the use of gates, grids across the intersecting road, or fencing that is run up the intersecting road for a few hundred metres.



Photo 4.5 Example of koala fencing along Picton Road in Sydney's south-west. The photo on the right shows a break in koala fence to provide vehicle access. The gap underneath the gate is ~500 mm, which fauna can easily navigate their way under. Gaps underneath gates need to be minimised as much as possible

In accordance with the Draft Wildlife Connectivity Guidelines (TfNSW, 2011), the following design requirements for fauna fencing are recommended for proposed detailed design:

- use cyclone-mesh with a galvanised steel sheet across the top section of fence
- do not use barbed wire
- minimum 1.8 metres in height to prevent kangaroos from jumping over
- use fence returns
- be used in conjunction with fauna crossing structures (e. g. bridges and underpasses).

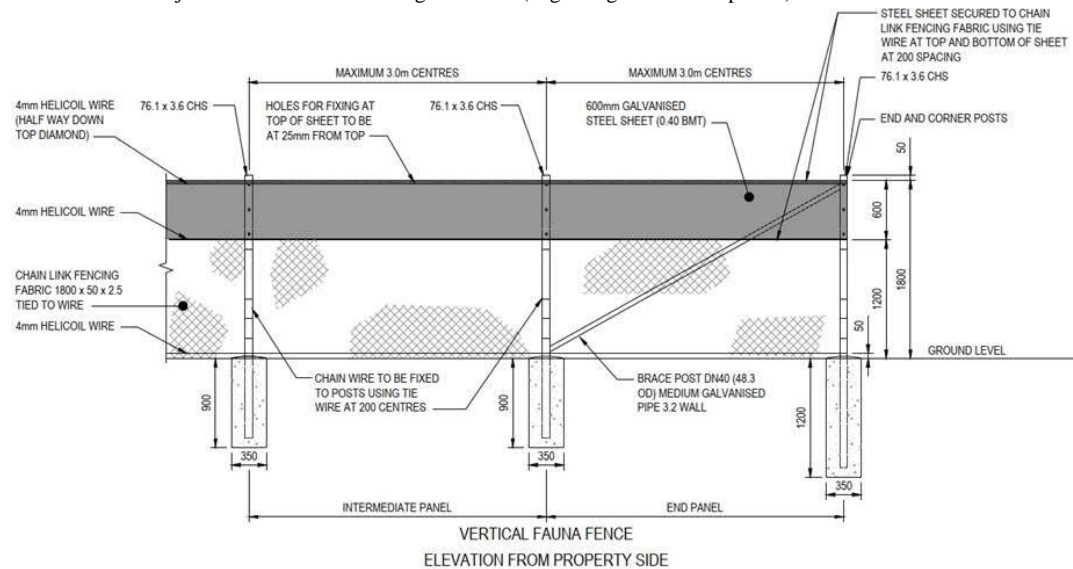


Figure 4.2 Example of a fauna fence suitable to prevent koala access (WSP, 2021)

4.4.2 KOALA GRIDS

Koala grids can be installed when there is a break in long, continuous fauna fencing (e.g. residential access or local road) and they are a modified cattle grid. Koala grids can maintain the flow of human traffic while potentially preventing egress onto road corridors by koalas. While there is limited data demonstrating their success, koala grids installed on a road in the Lismore Local Government Area reportedly prevented koala roadkill over a 6-year period (DPIE, 2020b).



Photo 4.6 Example of a koala grid along Picton Road, where there is a break in continuous fencing for residential access

5 CONCLUSIONS

5.1 HIGHEST SCORING OPTION

The outcomes of the qualitative options assessment in Table 4.3 are very similar but the highest scoring option was Option 2 (score of 11).

Option 2 involves install fauna fencing both sides of Heathcote Rd road reserve for ~ 600 metres from the bridge abutments to existing Defence fencing and to St George Crescent (tie in fencing to the rock cutting near St George Crescent). A section of Defence fencing (~260 metres) would need to be replaced or modified (while meeting Defence controlled access fencing requirements) along its current alignment. Option 2 fencing then cuts back into the road reserve to avoid fencing in the creek, and then ties back into the new Defence fencing.

Option 2 is consistent with recommendations outlined in best practice *Planning Guidelines for Koala Conservation and Recovery* (McAlpine et al, 2006), *How to keep Koalas off the road: Koala vehicle-strike Fact Sheet 2* (DPIE, 2020) and *Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas* (DPIE, 2019) as long, uninterrupted sections of fauna fencing used in conjunction with crossing structures are proven to be effective for mitigating koala vehicle strike.

Option 1 scored marginally less because of the higher relative cost of installation (score of 10).

Option 3 scored marginally less because it comprises only short lengths of fencing within the vicinity of Deadmans Creek Bridge and shorter lengths of fencing are less effective in funneling koalas (score of 10).

5.2 MONITORING AND EVALUATION

The NSW Koala strategy 2018-21 includes a range of measures to stabilise and then improve the status of koala populations across the state. The overall effectiveness of the various measures, including mitigating koala roadkill hotspots should be quantified to improve the delivery and effectiveness of future roadkill hotspot investigations.

Monitoring and evaluation should commence prior to construction and include a more rigorous assessment of the current rate and location of koala roadkill. This can be achieved through engagement with the local community recording koala roadkill, both before and after installation. Once installed, it is recommended that monitoring of the Deadmans Creek Bridge and strategic sections of fencing are monitored for koala activity for a period of six years (on the 1st, 2nd, 4th and 6th year) to account for response to climatic variables and stochastic events.

An annual review of roadkill records (from BioNet and recorded by the local community) should be undertaken to quantify the rate of roadkill in the vicinity of the mitigation measures and at the fence ends.

Maintenance of the fencing and other infrastructure should be undertaken in accordance with current TfNSW Routine Services maintenance specifications for the relevant road (e. g. 2, 3 and 5 years).

6 LIMITATIONS

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APPENDIX A

RAW FLORISTIC DATA



Table A.1 Floristic data from Q1 for PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau – High Condition

Q1	PCT 1789 - High Condition	Date: 10/05/2021	Species	Cover	Abundance	Covers																		
						# spp	Native		Trees		Shrub		Grass		Forb		Fern		Other		Exotic		High Threat	
							Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
				32			32	4	11	9	5	2	1					0		0				
				Sum cover			Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum				
				29.7			29.7	13	8.6	6.8	0.5	1.1	0.1				0		0					
				10			10																	
				2			2																	
				0.5			0.5																	
				0.1			0.1																	
				1			1																	
				1			1																	
				5			5																	
				0.1			0.1																	
				1			1																	
				1			1																	
				3			3																	
				35			35																	
				15			15																	
				30			30																	
				40			40																	
				30			30																	
				3			3																	
				25			25																	
				35			35																	
				5			5																	
				10			10																	
				20			20																	
				30			30																	
				3			3																	
				35			35																	
				3			3																	

Project No PS124693
Options to reduce Koala vehicle strike along Heathcote Road, near Deadmans Creek
Transport for NSW

Table A.2 Floristic data from Q4 for PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau – High Condition

Q4	PCT 1789 - High Condition	Date: 10/05/2021	Species	Cover	Abundance	Covers																		
						# spp	Native		Trees		Shrubs		Grass		Forb		Fern		Other		Exotic		High Threat	
						Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	
						16	14	4	3	3	1	2	1	2	1	2	2	2	2	2				
						Sum cover	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum				
						101	101	24	21	46	0.1	10	0.1	10	0.1	0.2	0.2	0.2	0.2	0.2				
				10	4	TG	10																	
				10	11	TG	10																	
				2	3	TG	2																	
				2	15	TG	2																	
				3	50	SG			3															
				3	15	SG			3															
				10	100	EG							10											
				40	100	GG						40												
				0.1	3	OG									0.1									
				0.1	1	HT													0.1					
				0.5	50	GG						0.5												
				0.1	20	HT													0.1					
				15	1	SG			15															
				0.1	100	EG								0.1										
				5	200	GG						5												
				0.1	100	FG													0.1					

Table A.3 Floristic data from Q5 for PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau – High Condition

Cover			Abundance		Covers		Native		Trees	Shrubs	Grass	Forb	Fern	Other	Exotic		High Threat	
Species			# spp	Count	Sum	Count	Sum	Count	Sum	Count	Sum	Count	Sum	Count	Sum	Count	Sum	
			30	30	63.5	4	17	11	26.1	8	20	4	0	3	0	0	0	
			Sum cover															
			63.5															

Table A.4 Floristic data from Q2 for PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion moderate condition

Q2 - PCT 1232 - Moderate

Date: 10/05/2021

Species	Cover	Abundance	Covers		Native Count	Trees Count	Shrubs Count	Grass Count	Forb Count	Fern Count	Other Count	Exotic		High Threat	
			# spp	Sum cover								Count	Sum	Count	Sum
			10	66.4	6	2	2	2	0	0	0	4	20.3	3	20.2
					Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum
					46.1	11	32	3.1	0	0	0	20.3	20.3	20.2	20.2
<i>Melaleuca styphelioides</i>	30	50	SG				30								
<i>Melaleuca linariifolia</i>	2	15	SG				2								
<i>Eucalyptus amplifolia</i>	1	2	TG			1									
<i>Casuarina glauca</i>	10	30	TG			10									
<i>Ehrharta erecta</i>	20	500	HT											20	
<i>Baumea juncea</i>	3	50	GG					3							
<i>Microlaena stipoides</i> var. <i>stipoides</i>	0.1	1	GG					0.1							
<i>Setaria parviflora</i>	0.1	1	EX									0.1			
<i>Ligustrum sinense</i>	0.1	25	HT											0.1	
<i>Asparagus asparagoides</i>	0.1	10	HT											0.1	

Table A.5 Floristic data from Q3 for PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion moderate condition

Q3 - PCT 1232 - Moderate

Date: 10/05/2021

Species	Cover	Abundance	Covers		Native Count	Trees Count	Shrubs Count	Grass Count	Forb Count	Fern Count	Other Count	Exotic		High Threat Count
			# spp	Sum cover								Count	Sum	
			8	47.3	6	1	3	2	0	0	0	2	7	2
					Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum	Sum
					40.3	5	30.1	5.2	0	0	0	7	7	7
<i>Melaleuca styphelioides</i>	25	70	SG				25							
<i>Melaleuca linariifolia</i>	5	20	SG				5							
<i>Casuarina glauca</i>	5	50	TG			5								
<i>Ehrharta erecta</i>	5	500	HT											5
<i>Asparagus asparagoides</i>	2	100	HT											2
<i>Goodenia ovata</i>	0.1	3	SG				0.1							
<i>Juncus continuus</i>	5	10	GG					5						
<i>Gahnia sieberiana</i>	0.2	4	GG					0.2						

APPENDIX B

PLANT COMMUNITY TYPES



B1 PCT 1789 SMOOTH-BARKED APPLE – BLACKBUTT – RED BLOODWOOD OPEN FOREST IN ENRICHED SANDSTONE GULLIES OF THE WESTERN WORONORA PLATEAU

The occurrence of this vegetation type within the study area is illustrated in Figure 3.1 with photographic representation provided in Photo B.1 to Photo B.4. An overview of floristic and structural composition is presented in Table B.1. A general description is provided below.

Vegetation formation: KF_CH5B Dry Sclerophyll Forests (Shrubby sub-formation)

Vegetation class: Sydney Hinterland Dry Sclerophyll Forests

PCT: PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau

Extent in the study area: 6.79 hectares

Conservation status: Not listed

Estimate of percent cleared: 20%

Landscape position: Higher elevations and sandstone gullies of the study area occurring on sandstone substrates

PCT Justification: In assigning this vegetation type, the following three candidate PCTs were considered based on floristic similarities and given the communities are known to intergrade:

- PCT 1790 Red Bloodwood - Grey Gum - Stringybark open forest on enriched sandstone ridges of the western Woronora plateau and lower Blue Mountains.
- PCT 1776 – Smooth-barked Apple – Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast.
- PCT 1785 – Smooth-barked Apple - Sydney Peppermint - Blackbutt tall open forest on enriched sandstones around Helensburgh.

Based on the overall strength of PCT 1789 analysis, the landscape position of sandstone gullies associated with sandstone substrate. However, some areas of this community occurred on the upper slopes and is likely a transition to PCT 1776. The dominance of *Eucalyptus pilularis* (Blackbutt), *Eucalyptus punctata* (Grey Gum) and *Angophora costata* (Smooth-barked Apple), PCT 1789 was considered the most closely aligned PCT to this vegetation type.

Condition: Three distinct vegetation zones were assigned within this vegetation type based on broad condition state. These are:

- High condition: The vegetation was recorded in relatively intact high condition – the presence of hollow-bearing trees and large *Eucalyptus pilularis* (Blackbutt) trees occur within this vegetation zone. Photographic representation is presented in Photo B.2, Photo B.3 and Photo B.4.
- Moderate condition: This condition class is in a regeneration state due to clearing associated with Heathcote Road and under the power easement for fire management. Photographic representation is presented in Photo B.1.
- Disturbed condition.

A comparison of PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau plot data recorded against PCT condition benchmark data is provided in Table B.2 below.

Vegetation integrity survey plots: Q1, Q4 and Q5 (High condition). No BAM plots were conducted within the Moderate or disturbed condition of this PCT. See Appendix A for full floristic and structural data.



Photo B.1 PCT 1789 Moderate condition – regrowth under the powerline in the east of the study area



Photo B.2 PCT 1789 High condition – Q1 adjoining Holsworthy Defence base on the western side of Heathcote Road.



Photo B.3 PCT 1789 High condition – on the western side of Heathcote Road in the west of the study area



Photo B.4 PCT 1789 High condition – at the intersection of St George Crescent and Heathcote Road (western side is high condition)

Table B.1 PCT 1789 overview of floristic and structural composition

GROWTH FORM	AVERAGE % FOLIAGE COVER	DOMINANT SPECIES (NATIVE AND EXOTIC)
Trees	18%	<i>Eucalyptus pilularis</i> (Blackbutt), <i>Eucalyptus punctata</i> (Grey Gum), <i>Angophora costata</i> (Smooth-barked Apple), <i>Allocasuarina torulosa</i> (Forest She Oak)
Shrubs	19%	<i>Acacia terminalis</i> (Sunshine Wattle), <i>Petrophile sessilis</i> (Conesticks), <i>Persoonia linearis</i> (Narrow-leaved Geebung), <i>Persoonia levis</i> (Broad-leaved Geebung), <i>Exocarpos cupressiformis</i> (Ballart Cherry), and <i>Dodonaea triquetra</i> (Large-leaved Hop-bush)
Grass and grass like	24%	<i>Entolasia stricta</i> (Wiry Panic), <i>Themeda triandra</i> (Kangaroo Grass), <i>Lomandra longifolia</i> (Spiked Mat-rush), <i>Lomandra obliqua</i> , <i>Aristida vagans</i> (Threeawn Speargrass) and <i>Panicum simile</i> (Two-colour Panic)
Forb	0.2%	<i>Dianella revoluta</i> var. <i>revolute</i> (Blue Flax-lily), <i>Phyllanthus gunnii</i> (Scrubby Spurge), <i>Lobelia purpurascens</i> (Whiteroot)
Fern	3.3%	<i>Pteridium esculentum</i> (Bracken Fern)
Other	0.16%	<i>Billardiera scandens</i> (Hairy Apple Berry), <i>Glycine tabacina</i> , <i>Hardenbergia violacea</i> (False Sarsaparilla)
Exotic	0%	None
High threat weed	0.07%	<i>Ligustrum sinense</i> * (Small-leaved Privet) and <i>Senecio madagascariensis</i> (Fireweed)

Table B.2 Comparison of PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau plot data against PCT condition benchmark data

PLOT	TREE RICHNESS	SHRUB RICHNESS	GRASS RICHNESS	FORB RICHNESS	FERN RICHNESS	OTHER RICHNESS	TREE COVER	SHRUB COVER	GRASS COVER	FORB COVER	FERN COVER	OTHER COVER	LENGTH TIMBER	LEAF LITTER	LARGE TREE
BM ¹	6	22	9	9	2	4	60	56	23	6	0	3	45	75	3(50)
Q1	4	11	9	5	2	1	12.6	8.6	6.8	0.5	1.1	0.1	24	24	3
Q4	4	3	3	1	2	1	24	21	45.5	0.1	10.1	0.1	25	26	4
Q5	4	11	8	4	0	3	17	26.1	19.7	0.4	0	0.3	16	47	2

(1) Benchmark data for equivalent community in Sydney Basin IBRA bioregion (Vegetation Type: PCT 1789 Smooth-barked Apple – Blackbutt – Red Bloodwood open forest in enriched sandstone gullies of the western Woronora plateau Keith Formation KF_CHSB Dry Sclerophyll Forests (Shrubby sub-formation) Keith Class: Sydney Hinterland Dry Sclerophyll Forests, source (Office of Environment & Heritage 2018).

B2 PCT 1232 SWAMP OAK SWAMP FOREST SYDNEY BASIN BIOREGION AND SOUTH EAST CORNER BIOREGION

The occurrence of this vegetation type within the study area is illustrated in Figure 3.1 with photographic representation provided in Photo B.5 and Photo B.6. An overview of floristic and structural composition is presented in Table B.3. A general description is provided below.

Vegetation formation: KF_CH9 Forested Wetland

Vegetation class: Coastal Swamp Forests

PCT: 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion

Extent in the study area: 0.29 hectares

Conservation status: Endangered Ecological Community BC Act - Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions

Estimate of percent cleared: 90%

Landscape position: occurs on saline sediments of Deadmans Creek, which is periodically inundated by saline water at high tides from the Georges River.

PCT Justification: In assigning this vegetation type, the following three candidate PCTs were considered based on floristic similarities and given the communities are known to intergrade:

- PCT 1234 Swamp Oak Swamp Forest fringing estuaries, Sydney Basin Bioregion and South East Corner Bioregion
- PCT 1236 – Swamp Paperbark - Swamp Oak tall shrubland on estuarine flats, Sydney Basin Bioregion and South East Corner Bioregion
- PCT 1800 Swamp Oak open forest on riverflats of the Cumberland Plain and Hunter Valley.

Casuarina glauca (Swamp Oak) and *Melaleuca styphelioides* (Prickly-leaved Paperbark) were the dominant canopy species. Several dominant canopy species identified in PCT 1232 are absent from the PCT present within the study area. However, it is likely that this PCT has previously been cleared which has resulted in a dense regrowth of *Melaleuca styphelioides* (Prickly-leaved Paperbark) and *Melaleuca linariifolia* (Flax-leaved Paperbark).

Based on the overall strength of PCT 1232 analysis, the landscape position on saline sediments which occurs below the high tide mark and dominant canopy species, the PCT recorded within the study area is most closely aligned with PCT 1232.

Condition: Moderate – the vegetation has previously been cleared with a dense regrowth of *Melaleuca styphelioides* (Prickly-leaved Paperbark) and *Melaleuca linariifolia* (Flax-leaved Paperbark). This PCT is subject to ongoing edge effects from Heathcote Road. A comparison of PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion plot data recorded against PCT condition benchmark data is provided in Table B.4.

Vegetation integrity survey plots: Q2 and Q3. See Appendix A for full floristic and structural data.



Table B.3 PCT 1232 overview of floristic and structural composition

GROWTH FORM	AVERAGE % FOLIAGE COVER	DOMINANT SPECIES (NATIVE AND EXOTIC)
Trees	8%	<i>Casuarina glauca</i>
Shrubs	32%	<i>Melaleuca styphelioides</i> (Prickly-leaved Paperbark), <i>Melaleuca linariifolia</i> (Snow-in Summer)
Grass and grass like	4%	<i>Microlaena stipoides</i> var. <i>stipoides</i> (Weeping Grass), <i>Cynodon dactylon</i> (Couch), <i>Machaerina juncea</i> (Bare Twig-rush) and <i>Carex inversa</i>
Forb	0%	-
Fern	0%	-
Other	0%	-
Exotic	0.1%	<i>Setaria parviflora</i> * (Pidgeon Grass)
High Threat Weed	13%	<i>Ehrharta erecta</i> * (Panic Veldtgrass) <i>Ligustrum sinense</i> * (Small-leaved Privet) and <i>Asparagus asparagoides</i> * (Bridal Creeper)

Table B.4 Comparison of PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion plot data against PCT condition benchmark data

PLOT	TREE RICHNESS	SHRUB RICHNESS	GRASS RICHNESS	FORB RICHNESS	FERN RICHNESS	OTHER RICHNESS	TREE COVER	SHRUB COVER	GRASS COVER	FORB COVER	FERN COVER	OTHER COVER	LENGTH TIMBER	LEAF LITTER	LARGE TREE
BM ¹	4	9	8	7	2	5	16	23	56	3	2	3	44	42	5
Q2	2	2	2	0	0	0	11	32	3.1	0	0	0	100	70	1
Q3	1	3	2	0	0	0	5	30.1	5.2	0	0	0	75	49	1

(1) Benchmark data for equivalent community in Sydney Basin IBRA bioregion (Vegetation Type: PCT 1232 Swamp Oak floodplain Forest, Sydney Basin Bioregion and South East Corner Bioregion Keith Formation KF_CH9 Forested Wetlands Keith Class: Coastal Swamp Forests, source (Office of Environment & Heritage 2018)).

B3 MISCELLANEOUS ECOSYSTEM – EXOTIC GRASSLAND

This non-native vegetation type consists of exotic forbs and grasses. The grassland that occurs on the road verges is the old bridge location and is regularly slashed as part of routine maintenance associated with Heathcote Road. The distribution of the exotic grassland is shown in Figure 3.1. Photographic representation is provided in Photo B.7 below. Overall, this vegetation formed 0.66 hectares within the study area.

This vegetation type does not align to any recognised plant community type in NSW due to its limited native vegetation and degraded condition. As such, it has been aligned to exotic grassland. Within the study area this vegetation type was mostly dominated by exotic species such as *Ehrharta erecta** (Panic Veldtgrass), *Setaria parviflora** (Pidgeon Grass), *Senecio madagascariensis* (Fireweed), *Verbena bonariensis** (Purpletop), *Sida rhombifolia* (Paddy's Lucerne), *Gomphocarpus fruticosus* (Narrow-leaved Cotton Bush), *Bidens pilosa** (Cobblers Pegs), and *Cenchrus clandestinum** (Kikuyu).



Photo B.7 Miscellaneous ecosystem – Exotic grassland near Deadmans Creek Bridge

APPENDIX C

COASTAL SEPP MAPPING

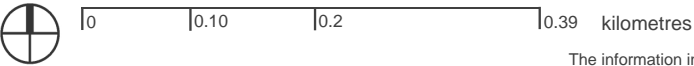




Coastal Management SEPP 2018

- Legend
- Coastal Wetlands
 - Proximity Area for Coastal Wetlands

Notes:



Heathcote Road Koala Fence Options

The information in this map is correct to the best of our knowledge. No warranty or guarantee is provided and no liability is accepted for any loss or damage resulting from any person relying upon or using the information contained in the map.

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