CONSERVATION COUNCIL ACT REGION

Submission to National Capital Authority & ACTPLA

Works approval & Development application: Light Rail Stage 2a

May 2023

The Conservation Council ACT Region is the peak non-government environment organisation for the Canberra region. Since 1981, we have spoken up for a healthy environment and a sustainable future for our region. We harness the collective energy, expertise and experience of our more than 40 member groups to promote sound policy and action on the environment.

We campaign for a safe climate, to protect biodiversity in our urban and natural areas, to protect and enhance our waterways, reduce waste, and promote sustainable transport and planning for our city. Working in the ACT and region to influence governments and build widespread support within the community and business, we put forward evidence-based solutions and innovative ideas for how we can live sustainably.

At a time when we need to reimagine a better future, we understand that the changes we need will only happen with the collective support of our community.

This submission has been developed in consultation with members of the Conservation Council's Transport Working Group: Australian Electric Vehicle Association, Living Streets Canberra, Pedal Power ACT, Public Transport Association of Canberra, SEE-Change, and ACT Council of Social Services, but may vary from the individual positions of each organisation.

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Introduction

The Conservation Council ACT Region welcomes the opportunity to provide comment on the NCA Works Approval and ACT Government Development Application for Light Rail Stage 2A.

The Council supports the development of electric light rail as part of an integrated public and active transport network that enables Canberrans to choose affordable, safe, convenient, low-emissions, car-free travel.

The Environmental Assessment document[1] shows consideration of input gathered from the community during extensive consultation[2], and a range of principles including gender-sensitive design and ecologically sustainable development.

Light rail is an important, once-in-a-lifetime, city-building project. Thus, the Council urges the Government to make the most of this opportunity by ensuring the active travel infrastructure, urban greenery, and materials sustainability is of world-leading standard, and cultivates an Australian character for the “bush capital”.

The Council acknowledges that there are many factors constraining the pace of light rail construction, but urges the Government to accelerate the project both to respond to the IPCC’s most recent warning about the required pace of climate action[3] and to more rapidly meet the transport needs of the entire Canberra community.

Noting that earthworks are already underway to reconfigure the intersection of London Cct and Commonwealth Ave to accommodate the approved route for Light Rail Stage 2a, the Council offers the following comments to refine the final design of Stage 2a.

Comments on selected aspects of Light Rail Stage 2a project documents

Landscaping and tree selection

The Council supports the application of water-sensitive urban design such as the use of grassed tracks, permeable paving materials and castellated kerbs.

As is self-evident when moving around the city, Canberra has a history of planting introduced tree species such as Platanus x acerifolia (London Plane trees) and Quercus palustris (Pin oak), often chosen historically to recreate an idealised European street character. Whilst these species contribute to the pretty autumn visual appeal of the city, they can be problematic with seed and leaf drops and allergenic pollens, and often provide little in the way of habitat for native species.

As demonstrated by the plantings along Northbourne Ave for Stage 1, the construction of light rail offers the opportunity to shift the character of urban greenery and restore native species. The Conservation Council appreciates the consideration of design characteristics such as spread, lifespan and resilience, in the selection of trees, but recommends selecting native species that offer

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[1] Environmental Assessment
https://www.nca.gov.au/sites/default/files/2023-03/Environmental%20Assessment.pdf
[2] Consultation Report
https://www.nca.gov.au/sites/default/files/2023-03/Environmental%20Assessment%20Appendix%20B%20-%20Consultation%20Report.pdf
[3] IPCC, 2023, ‘Urgent climate action can secure a liveable future for all’, Press release, 20 March,
https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf

multiple ecosystem services (particularly shade and habitat). There are many beautiful native tree varieties[4] that could redefine “stately” avenues with an Australian character fitting for our “bush capital”.

Ground-cover and understory plantings should similarly be predominantly native species, in mixes that recreate native woodlands and grasslands rather than monocultures, to create habitat for local birds, marsupials, reptiles and insects.

Active travel infrastructure

Pedestrian safety

For anyone walking or rolling other than on a bicycle, the highest priority must be given to their safety.[5] Footpaths must be smooth to avoid trip hazards. They should be continuous and follow the least line of resistance to avoid people j-walking or taking short-cuts (forming “desire lines”). Pedestrian crossings should be level and straight, the shortest possible route, and the “green” crossing signals should endure for long enough to enable all pedestrians to cross the full width of all roads in a single signal cycle – make cars wait, not active travelers.

The “traps” at, for instance, Barry Drive intersection with Northbourne Ave, are designed to prevent pedestrians crossing the light rail tracks unawares, but greatly impede their travel and make walking slower and less attractive. These unexpected diversions are particularly problematic for people with physical disabilities and impaired vision. Instead of slowing down pedestrians, slow down the motor traffic, and provide other tactile and visual warnings about the light rail tracks.

Motor vehicles should be forced to slow down at all intersections along the Stage 2a route, for instance through the use of raised crossings. Cyclists should be separated from pedestrian paths as well as from motorists as described below, and at crossings to avoid cyclists endangering pedestrians and vice versa.

Lighting on footpaths and cycle paths must be of a high safety standard and consistent throughout the Stage 2a route to ensure that active travelers are visible to each other and motorists.

For more detailed recommendations, see the submission by Living Streets Canberra.

Protected cycle lanes and cycling services

The Council supports the building of protected cycle lanes around most of the western side of London Cct, and protected intersections on the corners of London Cct at Northbourne Ave and Commonwealth Drive. These protected intersections are the first of their kind in Canberra and will provide an important template for future developments across the city.

However, the interruptions to the protected cycle lane between University Ave and Edinburgh Ave going southwards, and between Edinburgh Ave and West Row going northwards[6] will force cyclists to ride either on the road or the pedestrian footpath, neither of which are safe outcomes either for cyclists or pedestrians. The cycle lane should be as continuously level and straight as possible,

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[4] For example: ‘Australian native trees’, Gardening with Angus, https://www.gardeningwithangus.com.au/australian-native-trees/

[5] The terms “pedestrian” and “walking” refer to any form of human-powered mobility that is not a bicycle: walking; using a wheelchair or other personal mobility device, including those with motors that can travel up to 10 km/h; pushing a pram; wheeling luggage; riding a scooter, skateboard, tricycle or rollerblades.

[6] Light Rail Stage 2a Active travel fact sheet, https://www.act.gov.au/__data/assets/pdf_file/0004/2198659/08.-23099-MP-Light-Rail-Stage-2A-Factsheet-Active-Travel.pdf

eliminating offset twists and bumpy changes of level at intersections and side streets. These ‘missing links’ and obstructions are a common frustration for cyclists, and become barriers that will stop people from cycling.

The Council strongly recommends that the project team redesign the streets to ensure complete connectivity of the protected cycle lane along the whole of the Stage 2a route from Alinga Street to Commonwealth Ave bridge. Examples of other cities both overseas and in Australia prove that the supposed issue of lack of space can be overcome. This would be an extremely valuable piece of cycling infrastructure that would increase connections to the lake for Canberra commuters and visitors.

The ACT Government should build secure, well-lit bike cages at as many light rail stations as practicable. As a minimum, there should be a bike cage at the Alinga St and Commonwealth Park stations. These cages must have security cameras to deter thieves and provide safety for cyclists. Lack of secure bike storage, particularly with the rising popularity of expensive e-bikes, is a significant deterrent to cycling. The cages should also include bike maintenance posts like those already installed around the city.

For more detailed recommendations, see the submissions by Pedal Power ACT and Living Streets Canberra.

Commonwealth Park station

The Council strongly recommends installing pedestrian crossings and platform access at both ends of the Commonwealth Park station. This would enable easier access onto the platform and more rapid clearing of passengers efficiently in the direction of travel towards their destination during major events at Commonwealth Park and Regatta Point or towards Acton or the Parliamentary triangle for residents and commuters, and reduce the likelihood of j-walking across Commonwealth Ave.

Shelters at all stations should be designed to shelter passengers from hot summer sun and cold winter winds. This will be particularly critical at the Commonwealth Park station where cold winds blast across Lake Burley-Griffin unobstructed. Waiting in cold weather is one of the biggest deterrents for would-be public transport passengers. Shelters should be designed to block prevailing winds from the ground up.

Road traffic speed should be reduced from 70km/h along Commonwealth Ave full time to ensure the safety of public transport users and active travelers.

For more detailed recommendations, see the submission by Living Streets Canberra.

Materials and furniture

Wherever possible, the construction of light rail should apply and showcase circular and sustainable design standards by incorporating recovered and innovative low-emissions materials.

The Council supports the intentions indicated in EA section 18.2.1 Construction, “to minimise the requirement for new materials as far as practical, designing out waste and pollution”, including on-site reuse of garden organics and products such as Reconophalt.

Because the construction of light rail across Canberra is projected to extend over many years, there is an excellent opportunity for the ACT Government to build long-term partnerships with local enterprises to recover, process and produce the materials needed during construction. A hub of

"MICROfactorie technologies"[7] could be developed under the Government's Circular Economy Strategy to make use of local waste streams including white goods and textiles to produce a variety of required products from ceramic tiles to plastics.

Street furniture and fixtures

The Council recommends the inclusion of street furniture created by Lids4Kids Australia.[8] The light rail project is an excellent opportunity to provide proper funding to Lids4Kids as well as implement and feature a scaled solution to the environmental pollution of plastic bottle lids that the non-profit organisation is diverting from landfill.

The light rail project team could also work with Thor's Hammer to procure recycled timbers.[9]

Steel and cement

The Council supports the use of recycled steel and other construction materials wherever engineering standards can be met.

Where new materials are required, the ACT Government should collaborate with SmaRT@UNSW, the CSIRO[10], ANU and other research institutions and industrial producers to source "green" steel and cement produced without fossil fuels. Examples include the steel process being developed by Boston Metal[11], and zero-carbon cement[12].

Tracks and vehicles

The Council supports the use of wireless vehicles for Stage 2a and beyond.

The Council recommends installing fare touch points inside light rail vehicles as well as at stations to reduce congestion on station platforms and reduce fare evasion.

The Council recommends the maximum speed limit of light rail vehicles be increased from 40km/h to 60km/h along the Stage 2a route to ensure rapid travel times, especially once the route is extended to Woden. If the object is to shift Canberrans from private cars onto public transport, the public transport vehicles need to be seen to be traveling faster than road traffic, not slower than it.

Integration with Buses

Bus stops should be retained at the Commonwealth Park station and expanded into bus bays out of the traffic lanes, so that passengers can directly link between rail and bus services. Bus stops should be added at all points where bus routes intersect with the light rail route, particularly at the intersection of London Cct and Commonwealth Ave. This will improve connections and reduce travel times for commuters heading east and west from the light rail route.

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[7] SMaRT@UNSW, MICROfactorie technologies, https://www.smart.unsw.edu.au/technologies-products/microfactorie-technologies
[8] Lids4Kids Australia, n.d., Recycled plastic benches gallery, https://www.lids4kids.org.au/about-1
[9] Thor's Hammer https://www.thors.com.au/
[10] Molloy, F, 2022, 'Steeling ourselves: How Australia can support the transition to net-zero steel', CSIRO, https://www.csiro.au/en/work-with-us/industries/mining-resources/Resourceful-magazine/Issue-26/Net-zero-steel
[11] James, M & Fernandez, T, 2022, 'Startup promises green steel by 2025 as decarbonisation race heats up', *ABC Illawarra*, 8 Feb 2022, https://www.abc.net.au/news/2022-02-08/startup-promises-green-steel-by-2025/100811450
[12] Beyond Zero Emissions, 2017, 'Rethinking cement: Zero carbon industry plan', https://bze.org.au/research_release/rethinking-cement/

Buses should be given priority over other motorists at all intersections along the Stage 2a route to reduce public transport transit times.

For more detailed recommendations, see the submissions by Public Transport Canberra and Living Streets Canberra.

Summary and Recommendations

The Conservation Council supports the construction of Stage 2a of light rail with the following recommendations:

1. Select native species for plantings.
2. Prioritise active travel by slowing motorists, not pedestrians and cyclists.
3. Ensure high standard, continuous lighting for footpaths and cycleways.
4. Pedestrians should be separated from cyclists throughout the Stage 2a route.
5. All pedestrian and cycle crossings should be level and straight, allowing time for an entire crossing in one cycle.
6. Redesign London Cct so that the protected cycle lanes are continuous from Alinga St to Commonwealth Ave Bridge.
7. Redesign Commonwealth Park Station to create passenger access and pedestrian crossings at both ends.
8. Build station shelters that protect passengers from sun and wind.
9. Retain and expand bus stops at Commonwealth Park station.
10. Add bus stops wherever bus routes intersect with light rail, particularly at the intersection of London Cct and Commonwealth Ave.
11. Prioritise buses over other motorists at all intersections.
12. Build secure bike storage cages at Alinga St and Commonwealth Park stations as a minimum.
13. Reduce the speed limit for road traffic on Commonwealth Ave.
14. Increase the speed limit for light rail vehicles to 60km/h.
15. Build circular economy partnerships with local enterprises to provide reclaimed materials for street furniture and construction.
16. Wherever possible incorporate “green” steel and concrete where reclaimed materials are unsuitable.
17. Install fare touch points inside light rail vehicles as well as on station platforms.