Proposal for a bike ramp at Bradfield Park Central

Response from Transport for NSW – March 2022

Introduction

In recent weeks, residents in Milsons Point and Kirribilli have called on Transport for NSW (Transport) to consider an alternative concept for a bike ramp in Bradfield Park Central (BPC). We have met community representatives on site to discuss the proposal, presented our feedback to North Sydney Councillors, and discussed the concept with senior Council executives and technical experts.

We appreciate the effort that has gone into this idea and acknowledge the community's passion for Bradfield Park and for the heritage of the Sydney Harbour Bridge. We also acknowledge that this proposal has been put forward as a 'compromise' and are encouraged by recent statements from community groups and Council, supporting improved access to the Sydney Harbour Bridge cycleway.

We have assessed the proposal in detail, both through independent technical reviews by Alex van Gent of Arcadis, and in light of our key objectives, for the design to:

- be safe and easily accessible by a wide range of ages and abilities
- avoid open space impacts and respond to and contribute to the place
- demonstrate design excellence
- not detract from the Sydney Harbour Bridge's heritage significance.

Our considered and evidenced view is the proposal is a compromise too far. It fails to ensure the cycleway is universally accessible to the widest possible group of riders – an important and non-negotiable objective of the project.

Peer review by Dick van den Dool

North Sydney Council commissioned Dick van den Dool, a reputable active transport designer, to conduct a peer review of the BPC proposal. Mr van den Dool has concluded the concept is a 'fair and reasonable response to a complex design challenge'.

We have read Mr van den Dool's review closely. We appreciate it is technically robust and broadly correct, though we disagree on some issues outlined below. But we depart from Mr van den Dool on the important and fundamental issue of who we should design this ramp for.

Mr van den Dool states it is not always 'feasible or logical' (page 8) to deliver an outcome suitable for a broad range of user groups. He argues the cycleway is predominantly used by commuters and interprets design guidelines on this basis to conclude the proposal provides a sufficient level of access.

We disagree with this premise and believe we must design this ramp for a broader range of users. The cycleway is primarily used by commuters today, but the intent is for it to be used by riders of all abilities in the coming years for both commuting and leisure. Our customers include a wide range of ages and levels of cycling experience, and those who currently find the steps a barrier to cycling would continue to be disadvantaged by the BPC proposal.

In addition, the report by Mr van den Dool is primarily focussed on rideability (curve radii, gradients, path widths, sight distances) for more competent riders. It does not consider the other key design factors such as context, heritage, view corridors, impacts to open space and the ground plane, bulk and scale, design excellence, and the community feedback we received in June 2021. All of these issues are critical to the development and selection of the right option.

Our concerns with the Bradfield Park proposal

In the context of striving to deliver a fully accessible ramp, we have the following specific concerns with the BPC proposal:

- **Challenging 'S' bends:** The proposed ramp has a series of reverse curves with a gradient of five per cent. Relatively steep curves are difficult for less capable riders to negotiate in both the uphill and downhill directions. The combination of sharp curves and downhill gradients would make it difficult and unsafe for less capable riders to negotiate on-coming riders while manoeuvring the bends. Our view of best practice is to avoid this where possible.
- **Insufficient respite:** The proposed ramp has a relatively long and steep section (83 metres at five per cent grade) between the ramp landing and the first respite section. This section is 19 metres long and has a 2.8 per cent grade on a relatively tight nine metre radius curve. A grade of nearly three per cent on a tight curve will not provide sufficient respite for less capable riders to safely negotiate the following 'S' bends.
- **Cycleway tie-in is unsafe:** The connection between the proposed ramp and SHB cycleway is a sharp 90 degrees. This would impede sight lines and could cause collisions as riders move on and off the ramp. This is a concern for all riders but in particular a significant risk for less capable riders.
- **Cycleway landing is unsafe**: The proposed ramp drops onto a busy pedestrian path on Burton Street via a long, straight section of path at a five per cent gradient. Riders would likely come off this decline at speed, potentially colliding with pedestrians at the ground level footpath. This is the reason why the looped ramp option proposed by Transport in June 2021 landed the ramp about 30 metres south of the Burton Street footpath, enabling riders to slow down on a level section of path as they approached Burton Street and pedestrians.

Developing an inclusive design

The Sydney Harbour Bridge cycleway is the only cross-Harbour bike route in the eastern part of the city. In addition, our research has shown there is significant latent demand for both commuting and leisure cycling over the Sydney Harbour Bridge.

For these reasons, we have always set out to design this ramp for the broadest possible group of riders. For the young and the old. For the experienced rider and the novice. For the fit and the differently abled. For the regular commuter and the weekend rider. For pedal bikes, e-bikes, cargo bikes and scooters.

In our pursuit of a truly accessible outcome, we drew upon a wide set of guidance, data, research, and case studies to understand what would make the ramp accessible and comfortable for the broadest possible range of riders.

This included:

- **Guidance** (including: *Guide to Road Design Part 6A*, Austroads; *A Guide to Inclusive Cycling*, Wheels for Wellbeing, *Dutch Design Manual for Bicycle and Pedestrian Bridges* and *Walking Space Guide*, *Cycleway Design Toolbox, Designing for Cycling and Micromobility* TfNSW),
- **Data** (from Transport for NSW, the City of Sydney, ABS and Austroads),
- **Research** (from Transport for NSW and the Institute of Sensible Transport),
- **Case studies** (including the Tibby Cotter, Anzac Bridge and Forest Way Shared Paths).

Applying this array of guidance led us to the conclusion that any ramp in Bradfield Park Central, where the cycleway sits between 9 and 11 metres above the ground, would need to be at least 240 metres long. This would push the ramp out across the entire area of the bowling greens or require a double loop to keep the footprint to a minimum.

Mr van den Dool states he is unclear on the basis of this calculation, that further design refinement ‘may’ be required to achieve compliance and this ‘may’ increase the ramp size.

Our project team and technical advisers Spackman Mossop Michaels, TZG and Aurecon, undertook validation on many loop options, including one very similar to this, and confirmed a length of about 240 metres is required to provide equitable and safe cycleway access at this location. There is no short ramp configuration that will meet the needs of all our customers.

To achieve compliance, the BPC proposal would have a far greater impact on open space and view corridors than what is depicted in the concept sketch. This was the rationale that led us to consider a double loop as one of the two concepts consulted on in June 2021.

The feedback from that consultation was clear. Across all groups of respondents, a linear ramp in Bradfield Park North was preferred over the loop ramp in Bradfield Park Central.

Community feedback identified a ramp in Bradfield Park Central would cause conflicts between bikes and pedestrians on Burton Street and interfere with the Kirribilli Markets and school sports that take place on the old bowling greens. It would also require the removal of the community centre and restaurant, which many people said they valued highly.

This feedback concurred with our own ongoing investigations which indicated that safely integrating bikes and pedestrians on Burton Street would be far more challenging than on Alfred Street South.

Conclusion: an accessible ramp developed through design excellence and collaboration

Transport has developed the linear ramp design through a robust and verified design process. Our team comprises urban design, heritage, active transport, customer experience and community engagement experts, which we have supplemented with leading design and technical expertise.

We have engaged the community in three distinct phases. The first was during our early options exploration, when we met five times with the North Sydney Mayor, local community group representatives, and local councillors; and seven times with North Sydney Council officers.

At these meetings we outlined our rationale, investigations, and options selection process, and offered to involve Council and community extensively in the design development. At a meeting on 19 April 2021, attended by community representatives and North Sydney Councillors, we outlined our two shortlisted ramp concepts, including the accessible loop option in Bradfield Park Central, and our plan to go out to broad community consultation. We also invited attendees to work with us to deliver the best possible outcome for cycling and the local community.

On 26 April 2021, and 24 May 2021, North Sydney Council put forward two motions rejecting both ramp options and advocating for a lift or on-deck solution to the problem of the 55 steps. In June 2021, we proceeded with broad community consultation on the two options and the outcome was resounding. Eight of ten respondents supported the project and 68 per cent supported the linear option.

We have also actively sought the input of the Transport Design Review Panel and NSW Heritage Council Approvals Committee; and reached far and wide as part of the competitive design process, shortlisting three high-calibre teams to develop the design. We have ensured independent adjudication of these designs through an expert Design Jury, Chaired by the Government Architect NSW.

We have engaged stakeholders extensively as we have progressed, developing a highly productive and collaborative relationship with Heritage NSW, and receiving positive feedback from the office of the Government Architect NSW for the quality of our process.

Our technically robust solution meets our objective to deliver accessible cycling infrastructure and, based on the feedback received through recent consultations, is supported by the majority of the community. The chosen design developed through this thorough and validated process will move forward to the detailed design phase of the project, and the community will have another opportunity to provide valuable feedback later this year.

Contact us

If you have any questions or would like more on the Sydney Harbour Bridge Cycleway Northern Access Project please contact our project team:


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