



Australian
Institute of
Architects

NSW

ABN 72 000 023 012

The Royal Australian Institute of Architects
trading as Australian Institute of Architects

NSW Chapter
Tusculum
3 Manning Street
Potts Point NSW 2011
t. 02 9246 4055
e. nsw@architecture.com.au

Friday 19 February 2021

The Hon. Rob Stokes, MP
The Hon. Melinda Pavey, MP
52 Martin Place
SYDNEY NSW 2000

Dear Ministers

RE: Waterloo Estate (South) Planning Proposal

The Australian Institute of Architects (the Institute) and its members are dedicated to raising the quality of the built environment for people and to the advancement of architecture. We seek to improve the enduring health and wellbeing of all Australians and our diverse communities. The design of the built environment shapes the places where we live, work and meet. Good design adds value to all aspects of the built environment and a significant sector of Australia's economy.

The planning and design of cities and towns to address today's challenges such as climate change, housing affordability, and equitable access to the community services of a growing population will significantly impact the shape of Australia's built environment, requiring governments to be committed to delivering a high quality, sustainable legacy for future generations. The buildings and urban solutions we accept today directly impact on our ability to successfully navigate these key issues in the future. We need to design and build today for the future we hope to have.

The Institute first made comment on proposals for the Waterloo Precinct in 2019. Since that time extensive masterplanning and the development of options has been undertaken by the LAHC and most recently by the City of Sydney.

Having studied the planning proposals by both the LAHC and the City of Sydney, the Institute notes the most evident differences between the proposals are:

- the number of towers, and
- the transfer of floorspace from the towers into continuous perimeter block forms in order to retain the same dwelling yield



Our 2019 submission stated:

“The Waterloo Estate is slated for development that will produce density equal to the highest levels found in Manhattan and Hong Kong, and higher than is found in any part of London, Rome, Frankfurt, Barcelona or any other US city. The Australian Institute of Architects (the Institute) understands the need and appropriateness of high density for this site, however this should not be at the expense of amenity in the private and public domain.”

It is important, at the outset, to recognise that achieving good outcomes for the built environment that will support environmental, social and economic benefits for all stakeholders in the case of the Waterloo Estate (South) is extremely difficult, if not impossible, given the density proposed by both schemes.

The Institute emphasizes there are fundamental principles of urban design that need to be considered for successful outcomes. These include:

- the maximum net FSR of ‘perimeter block’ forms before street proportions, solar access and sky-views are compromised is 2.5:1 and preferably 2.0:1; the proposal illustrates approximately 4:1 net FSR)
- beyond FSR 2.5:1 (that equates to approximately 7-8 storeys), podium and tower forms need to be introduced to achieve the higher yield without compromising amenity

Whilst the Institute appreciates the efforts of the City of Sydney to reduce the number of high-rise towers, it may be that an optimal arrangement lies somewhere between the two schemes **if the yield must be maintained.**

It is worth noting that the parts of Sydney that have adopted a perimeter block form are usually much lower in density and have frequent breaks between buildings, rather than the continuous form that is common in Berlin, Copenhagen, and Paris. This has a number of advantages in terms of outlook, glancing sunlight penetration (patches of sunlight), dissipation of urban heat as well as facilitating diversity of design and form.

Our summary with regard to the City of Sydney planning proposal

The Institute strongly supports:

- The revised street pattern, street widths and public domain, and in particular the improved accessibility
- The creation of a ‘main street’ in order to consolidate retail and create a legible structure



- The subdivision pattern and number of development lots - for its capacity to be delivered as many smaller developments, supporting design diversity and innovation, while noting that cross easements for car-parking may undermine this
- The increase in the amount of affordable housing and commitment to First Nations people accommodation and the proposed FSR bonus mechanism to achieve this
- A design procurement process that engages directly with community groups including indigenous and other resident groups, to animate local leadership and enrich the design response
- The potential for significantly reduced parking and its effect on dwelling costs, shorter development timelines, finer granularity of development lots, and life on the street
- Potential for a well-defined and repeating built form to also have limited and explicit development controls for a predictable and efficient approval process, noting that there should also be provision for innovation and exceptional circumstances
- The use of roof spaces as common areas and green roofs

The Institute expresses its concern with:

- The amount of floor space that has been transferred from the towers in the LAHC preferred masterplan scheme
- The height and continuity of the perimeter block form in relation to amenity (daylight, outlook and sky view), urban heating and its potential to have a 'canyon effect', that results from the transfer of floor space
- The amount, distribution, form and adaptability of car parking and its impacts on affordability, cost of construction, activation and pedestrianisation of streets, embodied CO₂, operational CO₂, granularity of ownership, titling and potential for multiple designers and the extent of deep soil. If the locational advantages of the precinct are being used to justify a very high density, these same advantages justify a very low car parking rate, much lower than currently proposed
- Commitment to, and strategies for, achieving a low carbon high performance precinct in accordance with Actions 68, 69 and 70 of the Eastern District Plan
- The design excellence provisions in the planning proposal allow for increased FSR, but not additional height. Given the high intensity of the current proposal it is difficult to understand how additional floor space could be accommodated within the proposed heights without further compromising amenity
- Height controls need to take rooftop common space, green roofs, and the need for access and commitment to rooftop solar into account
- The highly prescriptive LEP height controls and detailed built form controls in the Design Guide limit the design solutions and leave little scope for 'innovation'. As a result, there are limited benefits to the competitive process aside from detailed façade design. The highly defined LEP height controls will likely result in unnecessary 4.6 variations if a different outcome is identified through the competitive design process



- Reinstatement of the original north-south street grid provides a fine urban grain, however combined with the proposed heights and density contributes to the poor courtyard spaces, limited outlook from within dwellings and relentless street walls that reduce potential for solar access to dwellings during winter

Our recommendations

1. Built Form:
 - Retain the 3 towers but reduce the yield to allow a breaking up, lowering and greater articulation of the lower buildings particularly those more than 7 storeys, or
 - Consider 1-2 additional towers to allow a breaking up, lowering and greater articulation of the lower buildings particularly those more than 7 storeys, and
 - Tower locations should respond to topography, street hierarchy, with appropriate distance between towers and consideration of localised wind effects
 - Ensure building envelopes and in particular heights are sufficient to allow flexibility in design, variation in building height and alignment, and design excellence floor space bonus
 - Resolve conflicts that arise between the proposed built form, Design Guide and the Apartment Design Guide such as building separation, visual and acoustic privacy, solar access to living rooms and private open space for predominantly east-west facing buildings while providing appropriate sun shading
2. Sustainability:
 - Require the preparation of low-carbon, high efficiency strategies to reduce emissions, optimise the use of water, reduce waste and optimise car parking provision in accordance with Actions 68,69 and 70 of the Eastern District Plan. The strategies should consider energy (embodied, operational for buildings, transport and waste) water cycle, waste, and aim for a commitment to zero-carbon and set out implementation, monitoring and reporting approaches
 - Undertake further analysis of urban heat in relation to built form and future climate scenarios, noting that the 'urban canyons' may have cooling benefits by minimising heat gain but may also impede purging of hot air
3. Carparking:
 - Review car parking rates as suggested by the LAHC transport study, noted by the City of Sydney, *Housing Issues Paper* (2015), Hill PDA *Waterloo South Housing Diversity and Affordability Report* (p66) and in accordance with Action 19 of the Eastern District Plan. We strongly recommend the development of an affordable, adaptable car parking and alternative transport provision strategy including a transition to reduced car parking over time and consider electrification of the vehicle fleet



Australian
Institute of
Architects

NSW

ABN 72 000 023 012

The Royal Australian Institute of Architects
trading as Australian Institute of Architects

NSW Chapter
Tusculum
3 Manning Street
Potts Point NSW 2011
t. 02 9246 4055
e. nsw@architecture.com.au

4. Mature Trees:
 - Investigate the retention of mature trees and/or relocation of mature trees that are capable of being relocated

The proposed density of Waterloo Estate (South) is almost double that of any comparable area in Sydney. While the Institute recognises the planning system and controls are only one component in ensuring the delivery of a renewal precinct, greater clarity in relation to this delivery, the approval processes and ongoing governance and management is needed if the potential urban quality and environmental performance of this precinct is to be realised.

We welcome the opportunity for continued consultation on any of the concerns raised in this letter and we offer the Institute's support in assisting the government to achieve high quality urban design and architectural outcomes in this unique and important precinct.

Yours sincerely

Kate Concannon
NSW Chapter Manager
kate.concannon@architecture.com.au

We respectfully acknowledge the Traditional Custodians of the lands on which we work and pay respect to their Elders past, present and emerging.