INTRODUCTION

The Australian Institute of Landscape Architects (AILA) is a professional organisation representing landscape architects with core expertise in design of public space in cities including transport infrastructure and open space. AILA champions quality design for public open spaces, stronger communities and greater environmental stewardship, for which we advocate with all levels of government.

We provide our members - in urban and rural Australia, and overseas – with training, recognition and a community of practice to share knowledge, ideas and action.

With our members, we anticipate and develop a leading position on issues of concern in landscape architecture. Alongside government and allied professions, we work to improve the design, planning and management of the natural and built environment. Policies and position statements on issues relevant to the evaluation of the North East Link Project and the associated Environment Effects Statement (EES) are listed below and can be viewed on our web site at www.aila.org.au

Cultural heritage
Connection to Country Position Statement
Connection to Country Position Statement Case Studies

Climate change and adaption,
Adaptation to the Changing Climate: Building Resilience

Design of cities
Healthy Communities – Healthy Living Landscape solutions
Active Travel
The Critical Role of Landscape Architects in Local Government
Public Transport
We are keen to comment on the North East Link Project EES from the position of the community interest, design quality, and the environment, informed by the above policies and position statements. In addition, AILA would like to highlight that in March 2019 the United Nations declared the next decade as the ‘UN Decade on Ecosystem Restoration’. This recognises the role that quality natural systems have in our cities to mitigate future climate shocks and to support human health & well-being and biodiversity.

We recognise that the EES documentation is based on a reference design and that the Victorian state government is intending to call for bids from consortia that will include more-detailed designs and prices from tenderers. This process will involve landscape architects working for the bid teams. AILA hopes that there will also be landscape architects involved with the tender evaluation process on behalf of the government. In both instances, our members will just be a small part of the process, important participants, nevertheless, in multidisciplinary teams required by the complexity of the project and its approval process.

Documentation in the EES is effectively a form of brief for the bid teams and the quality of the selected design will depend on price, methodology and design. Such a process requires complex assessment of the entire offer of each bid team. It will be important for the bid assessment panel to have wide-ranging understanding and skills in design, social impact, environmental impact and economics over the entire life of the project, which could extend to the end of this century. This process will be critical to getting a quality outcome for the community, but it is not explained in any detail in the EES.

This submission in response to the EES has been prepared by the AILA Victoria Environment Committee, with endorsement from AILA Victoria’s executive. It does not represent the views of all members, including those involved with the project, who are contractually unable to participate in this discussion.

**PROJECT JUSTIFICATION**

It is AILA’s view that planning of cities in Australia is out of sync with world best practice. Expansion of cities as low-density sprawl, as practiced in all Australian cities, is undesirable and results in one of the highest carbon footprints per capita in the world. It is widely recognised that well-designed higher-density cities that are supported by efficient public and active transport are likely to be more efficient and liveable and have a much lower carbon footprint per capita.

North East Link is a massive new road project by any world standards and a project that would generally be avoided in cities in most other developed nations at this stage of the 21st century. However, this proposed project is justified as being a missing link in the planned
freeway network, and necessary to support the car-based urban sprawl that already exists to the north-west and east of Melbourne as a result of past planning policies and government decisions.

It should be noted that this is purely a road building project and it does not take seriously opportunities to explore value capture or well-integrated urban redevelopment incorporating mass transit that could reduce the use of cars and freight transport on roads. This is not part of the North East Link Project’s charter and does not seem to be have been seriously considered by the state government planning authorities.

While the section on climate impacts encourages best practice in selection of materials and management practices, its quantification of the carbon impact of the construction and operating phases declares that the project will increase Victoria’s CO₂ during construction by 0.25% and in operation by 0.07% with minimal reduction of CO₂ produced by vehicles when the new section of freeway is in operation. This is reported as an adequate response to the project objectives and negligible in terms of the state government’s aim of achieving net-zero emissions by 2050.

Given the significant cost of this project to the community, the following questions need to be asked:

Is this project the best allocation of state government funds? Would less ambitious (in terms of road capacity and engineering) and less expensive solutions not achieve better outcomes for all concerned?

The North East Link Urban Design Strategy

The North East Link Urban Design Strategy is a general but detailed response to the engineering drawings of the reference design covering matters that have relevance to our profession and are important to the community. This document applies recognised urban design principles and indicative precedents to the context of the site and the reference design. Essentially it shows how the current reference design can be developed to best fit the site conditions and community needs within and immediately adjoining the project site. It does not critique the reference design in any way, which we believe to be a shortcoming.

The North East Link Urban Design Strategy is essential to bid design teams in coming to grips with what is expected by the community. Unfortunately, the bid process won’t be judged only on compliance with urban design guidelines. The engineering merits and total financial offer are likely to be more important in the selection of the winning tender. Bid tenderers will have difficulty weighing up options for changing the reference design to achieve better urban design outcomes where they may limit cost, increase traffic efficiency and/or achieve better environmental or urban design outcomes. We encourage the project to enable and support variation from the reference design that reduces capacity and complexity of road geometry and reduces cost while achieving better urban design outcomes at lower cost and carbon footprint.
That said, these guidelines can, and should, also be used to negotiate refinement of the selected bid design until final project handover a decade from now. To this end, the North East Link Project and selected bid team must have the will and appropriately trained and skilled landscape architects and urban design professionals involved to the end of the project.

It is our view that the current EES documents are too rigid in seeming to require literal adoption of overly complex road geometry design when better urban design outcomes could be achieved with different road geometry and reduced traffic capacity solutions.

This is especially the case where significant vegetation is affected. The EES documents on existing vegetation are not detailed enough to know where all such conflicts exist, but, in the case of some mature red gums that predate white settlement, we believe the bid designers should be required to adjust their road or intersection geometry to protect such significant trees and ensure they can remain healthy in a dignified setting.

**The reference design and documentation**

AILA is concerned that the reference design documented in the EES appears to be a road engineer-led document that does not appear to have considered myriad options apart from broad discussion of alternative alignments and detailed design of one interchange.

The reporting of the reference design is summarised in the various EES documents in a way that is difficult to interrogate in detail. The plans and sections in the maps section attempt to represent intended road geometry and impacts of the reference design but the project has a massive scale and this makes impacts difficult to anticipate with certainty. It is hoped the bid designs will be better than the reference design and easier to interrogate, however, as it will be a closed process, the primary opportunity to influence the outcome appears to be by making a submission at this EES stage.

Comments are provided below in response to issues as we can best understand them, based on information made available in the EES.

**COMMENTARY ON THE REFERENCE DESIGN**

**The need for North East Link**

AILA accepts the justification for the North East link to connect M80 with Eastlink, particularly for road-based freight transport.

The analysis of the five strategic options reported in the Business Case executive summary seems inadequate because of its simplicity and can’t be effectively compared on the documentation made available.
AILA takes the view that adopted strategic Option 5 is the “big road” alternative and that is not desirable for Melbourne because the city needs to spend substantially on public transport and urban consolidation rather than catering for existing and continued car-dependent suburban growth.

It should be recognised that the reference design has a significant carbon footprint, which is counter to AILA policy on climate change and that the loss of mature vegetation is counter to our policy on green infrastructure.

Taking a global perspective, we believe this project goes against the trend of good practice in cities where projects aim to heal the scars created by roads and big freeways as in the Madrid River project (https://worldlandscapearchitect.com › News) or the “Big Dig project” in Boston (https://www.mass.gov/info-details/the-big-dig-project-background).

**Impact on vegetation and ecosystems**

Our overview of the EES documentation is that it is a massive road expansion with limited sections below ground and very complex interchanges. The loss of vegetation and open space seems substantial and the commitment for replacement seems inadequate considering the timeline of the project and the time vegetation is needs to develop. Increased vegetation through tree planting in the next few years is what is needed rather than a promise to get back to present canopy cover by, say, 2040 or 2050 under the current proposal. Please refer to Living Melbourne: Our metropolitan urban forest released this week by Resilient Melbourne on why we need to protect our existing urban forest. This strategy is a metropolitan collaboration seeking to ensure Melbourne’s green infrastructure is supporting liveability across all Melbourne into this climate change century.

**Open space and significant vegetation**

The EES doesn’t document existing open space and proposed future open space in terms of area, existing quality and facilities or required or proposed open space. The urban design guidelines do make general suggestions for much of the changes to open space but what actually eventuates will depend on the design of the winning bid team and future negotiations with local government and sporting bodies.

The proposed landscaped bridges provide some replacement open space that helps with pedestrian and cycle connections, but they could be expanded to be more significant and useful as open space and this possibility should be encouraged.
The reference design shows land acquired for the construction phase that will be available for public or private use when the project is complete. There does not seem to be analysis of the extent of this land and only general discussion of possible future uses.

We recommend that available open space on completion of the project should be at least equivalent to the space lost and that it should be developed by the project to a high standard in general accordance with the detailed recommendations of the Urban Design Strategy.

**AILA recommendation of an alternative reference design**

The reference design for this project has no alternative designs for this freeway connection (apart from minor option designs for one intersection) but it requires more than doubling the number of lanes in sections of the Eastern Freeway and “state of the art” interchange solutions for the new linking section of freeway above and below ground. The cost and impact of this labyrinth of carriageways, tunnels, sound walls and complex interchanges must be significant.

AILA would like to see an alternative, simpler reference design developed and evaluated before going to the market with expensive bids.

An outline of such a design would include:

- No further widening of the Eastern Freeway
- Consideration of a rail connection to Doncaster as initially intended, instead of proposed new dedicated bus lanes on the western side of the road reserve.
- Consideration of the alternative of accommodating an electric bus service within the existing road profile by reallocating or widening existing lanes rather than expanding the reserve to the west side.
- Reducing the capacity and simplifying the design of the new section of North East link to match with connecting freeways.
- Use of ‘time of travel’ price mechanisms to maintain the new link at efficient operating capacity favouring trucks over private cars.
- Discouraging park-and-ride at new and existing rail stations by not providing car parks.
- Developing a detailed active transport proposal for access to rail stations within 6 km of the new road system. Such a proposal could include compulsory purchase and rezoning of selected land with higher-density mixed-use development within walking distance of the rail stations and the development of a fully segregated cycle network that extends to 6 - 8 km from rail stations. All land acquired for the freeway construction, but not required after construction, should be put to higher-density mixed-use development and associated open space.
- Developing a green infrastructure plan in conjunction with the active transport plan that reallocates road space to tree planting, landscape and open space uses over the
entire area of the active transport precinct. Acquisition of land to deliver this plan if required should be enabled.

- Ensuring, through this type of precinct planning, that the canopy cover achieved will be double the existing canopy cover by 2030. This may mean implementing a majority of precinct improvements ahead of freeway construction.

AILA believes that such an alternative road design strategy would achieve the following:

- Connect the freeway network at minimum cost and a much lower carbon footprint, both during construction and in operation, by better facilitating transition to use of public transport and reduced need for car ownership.
- Help the state government achieve admirable carbon reduction targets long-term while also achieving increased liveability for areas adjoining the freeway.
- Value capture through control of redevelopment, which could help offset the cost of active transport networks, urban greening and the road project.

CONCLUSION

AILA is concerned that the reference design in the bid is too ambitious in terms of engineering design and the traffic volumes it is providing for. We recommend serious consideration of a more modest and more sustainable way of making this strategic road connection.

AILA would like to ensure that the development of this road project better integrates the works into its surroundings and enables the adjoining urban fabric to be improved in terms of its sustainability and liveability through a programme of public and private improvements around enhanced public and active transport options.

We are keen to have the opportunity to explore these possibilities with the North East Link Project and state and local governments when the opportunity arises.