The Committee Secretary Joint Standing Committee on the National Capital and External Territories PO Box 6021 Parliament House CANBERRA ACT 2600

Submission on The Immigration Bridge Australia Proposal

Dear Sir / Madam,

My submission focuses on the safety aspects and impracticality of this proposed footbridge, the detrimental effect such a hazard would have on water sports such as sailing and on alternative possibilities for a memorial to immigration.

Please note I have abbreviated "Lake Burley Griffin" to "LBG" in the body of my comments.

The History of Lake Burley Griffin as a Waterway

- I worked on the Commonwealth Bridge site in 1963 as a Contracts Officer for the Department of Works. After the lake filled, many people were disappointed that sailboats stayed out of Central Basin, although artists' / draftsmen's impressions had often portrayed sailing on this part of the lake. The reasons given for this by boat owners was that Commonwealth Bridge was too low for all but the smallest craft to fit under and that the pylons were too dangerous on a windy day for even small boats.
- Apparently, sailing clubs were consulted over clearance requirements, but engineering considerations took precedence in the design of Commonwealth Bridge.
- From the beginning of LBG, the area West of Commonwealth Bridge has been given over to water based activities, whereas both Central Basin and East Basin, fully a third of the lake, have remained largely free of water sports. East Basin is actually quite a barren water feature, offering little of scenic or recreational value.

Lake Burley Griffin – Final Form and Design Mistakes (in Retrospect)

- The final form of LBG was determined by engineering and topographical considerations. As would be expected, its final shape is not the same as on Walter Burley Griffin's drawings done in 1912. Various features were penned in, such as another central bridge, but the final reality after construction has made it impractical to include all of these features. We now know the only suitable location on LBG for a general launching and docking area for sailing craft is Lotus Bay. Had Walter Burley Griffin foreknowledge of this I have no doubt a planner of his experience, faced with this reality, would have rubbed out his Acton bridge doodle drawn in on his city plans.
- It is interesting to note that several boat ramps were part of the final design for LBG and they were constructed before the lake filled. All but one are installed in the wrong place, cannot be used or are rarely used.

The Multi-use Features of Lake Burley Griffin

- LBG is a lake of small useable size but it is a major waterway for sport and water activities, especially in the areas West of Commonwealth Bridge. With sailing, there are competitions on national and international standard courses, disability sailing and best practice sailing training. The value of water craft and boating facilities owned by Canberra citizens is in the millions of dollars. Sailing craft on the lake vary in size from small single crew types to very large classes, including the occasional 18 foot skiff. There is also windsurfing, rowing, kayaking, canoeing, dragon boats, tourist boats, triathlon events, swimming, birdwatching and fishing. For a long time now, there has been a lake community, with regular participants in the above activities often engaged in friendly exchange, including with rangers and Water Police.
- Thousands of people use LBG every year. It is not uncommon for the lake to be very crowded in summer when there are good winds and weather.
- Pedestrians and cyclists are well catered for at LBG. Few lakes in Australia would have almost all of their shores accessible to the public. Many lakes are part of national or state parks and their shores are only partly used. Pedestrians and cyclists here also have two large bridges across LBG which are supplied with safe footpaths.
- Currently, the lake offers a safe environment for a wide range of water activities with few natural or man-made obstructions. The area from Commonwealth Bridge to Government houses has offered boating enthusiasts magnificent vistas for the last 45 years. The boat ride to Government House is popular and is one of the great attractions of LBG for tourists, rowers and sailors.

Long-term Threats to Lake Burley Griffin

- The lake has recently had its long-standing amenity as an outstanding and popular venue for water activities placed under threat. This has happened in the past and may well recur until decisions are made about which features of LBG are to be retained.
- The first adverse proposal was for a footbridge to be built adjoining Lotus Bay launching and docking area linking the National Museum to Lennox Gardens. Such a bridge would become a man-made death trap to sailors and a wrecker of sailing craft.
- The second adverse proposal was for a footbridge to be built from Weston Park to the opposite shore. This would end the ability of both tourist boats and sailors to take the scenic trip along LBG to Government House and back.
- These two proposals involve other threats, namely to the lake vistas and to the National Capital / Walter Burley Griffin plan. I am leaving others more qualified than I am to comment on these aspects.

The Greatest Threat: Lives Lost and Safety

- The prevailing winds on LBG are North-westerlies but strong Westerlies are common. It is these latter winds that frequently cause boats to crowd into the area between Lennox Gardens and the National Museum.
- Mostly, sailors do not choose to sail in this area, they end up there. This is due to (especially when Westerlies are blowing)
 - the use of Lotus Bay for launching and docking
 - Lotus Bay can be overcrowded with water traffic and boats must stay outside the bay and wait for space to dock

- the need for recreational sailors to avoid boats racing and to stay off their course (there are race buoys near Lotus Bay), especially when the fleet is on the Attunga Point leg
- lack of skill and inexperience of some sailors
- jammed or malfunctioning gear in boats (both recreational and racing)
- the wind strength and gusts with subsequent greater wave power.
- On days in summer with strong winds, storms or squalls my experience has been that up to 30 craft, trying to make it to Lotus Bay, might be crowded into this narrow 300 metre stretch of water, some out of control, some overturned, all crew using their skills to the maximum to stay afloat or to head in.
- Commonwealth Bridge then becomes a real danger, but escape is at hand boats under control can turn left into West Basin which is protected from the West wind and where the crews can reorganise themselves or wait for the gusts to subside.
- The very area where this happens on a regular basis on LBG is the exact site of a proposed footbridge.
- Boats would crash into such a structure due to
 - masts hitting the footbridge
 - boats hitting pylons. Even one pylon is too many. Not since sailboats were invented can crews avoid marine obstacles other than by giving them a wide berth which is not possible in this narrow area. Even the best sailing craft cannot be steered accurately like a power boat
 - there would be nowhere to escape to, as West Basin is beyond the proposed site.
- The consequences of accidents of this nature would be risk of drowning and destruction of boats but even worse are injuries in the water. People quickly bleed to death in the water (shark victims usually die from blood loss).

Putting the Threats to Lake Burley Griffin in Context

- A lot of what I have outlined above is stating the obvious. So how could the Immigration Bridge proposal even start, let alone reach the stage it has?
- Here we have a plan that will obviously jeopardise the safety of sailors. Or result in the elimination of sailing and other water activities as Canberrans have known them since LBG filled 45 years ago.
- Water activities on LBG have been engaged in by many thousands of people from Canberra, interstate and overseas over the years and the lake will continue to attract many in future generations. Canberra clubs are leading sailing training centres for competitions at the national, international and Olympic levels and train up sailors with disabilities as well as crew for ocean yachting. The Australian Institute of Sport trains rowers to Olympic level and some windsurfers have competed internationally.
- The great vista from Commonwealth Bridge to the Brindabellas would disappear forever.

The Source of the Threats – "Professional" Planners

- Both of the proposals to make detrimental changes to lake use originated with planners.
- I am appalled that paid planners could propose placing a footbridge which adjoins the main spot on LBG for launching and docking sailing craft thus endangering the sport, boats and life.

- This reveals some interesting facts about planners employed in the ACT
 - planners here regard any body of water as an ornamental pond primarily for the use of pedestrians, cyclists, exercisers and outdoor cafes
 - they have no concept of LBG being a living, viable lake that provides water activities to people regardless of socio/economic status as well as a home to numerous species of animals in, on, around and above this body of water
 - they have no lake-centred perspective, only a land-based view
 - people employed in Canberra's planning agencies must be, on their drives around the lake, completely oblivious to the fact that LBG is often a busy, crowded waterway with sailing craft in abundance
 - the planners show a complete lack of knowledge of how the lake is used and how it has evolved from its inception
 - in proposing the Immigration Bridge, the planners demonstrated a callous disregard for the safety and well-being of lake users and their craft, merely in order to enact a doodle sketched on a tentative plan drawn around 1912, long before the lake had been finished
 - insensitivity has been shown to the Aboriginal ground at AIATSIS. The Immigration Bridge would end up adjoining their site and it is well known that our original inhabitants regard "immigration" as an invasion
 - even the basic plans do not make sense. We would have two footbridges that start somewhere (the National Museum and Weston Park) and end up nowhere (Lennox Gardens and Lady Denman Drive). Pedestrians are not clamouring for even more lake walks. These bridges would chop up the lake into smaller unviable pieces. As I have pointed out above (The History of Lake Burley Griffin as a Waterway) currently a third of LBG is almost devoid of water activity and two thirds are being fully utilised. Adding these footbridges would confine sailing activity to less than one third of LBG
 - the state of urban planning as an academic discipline must be in dire straits if local planners' designs for LBG are best practice. I now have some insight into the displeasure shown with the previous management of the NCA by the Australian Government, when it took office recently.

The Practicalities if Footbridges are Mandated (Sailing Perspective)

- The Weston Park footbridge would eliminate sailing and tourist boats going towards Government House and would perhaps hinder rowing sports.
- The Immigration Bridge, if built
 - must have no pylons, as explained above (The Greatest Threat: Lives Lost and Safety)
 - must allow for adequate mast clearance (i.e. waterline to masthead distance plus allowance for LBG highest water level plus wave heights reached plus clearance between masthead and lowest bridge bottom protuberances). For the Elliott 7 class (a large design raced on LBG), I calculated 18 metres (to be confirmed by Elliott owners). Other boats that have used LBG have had higher masts again, eg: trimarans and 18' skiffs.

Even if the clearance was 20 metres, some large craft's mast will eventually hit the footbridge.

To put such a footbridge into perspective, the above clearance is about 3 times the average clearance of Commonwealth Bridge at its centre. This would have implications for lake views and aesthetics

- the minimum clearance must apply at each end of the bridge, as well as its centre, as sailboats cannot aim for dead centre in normal winds, let alone high winds.
- The usual water pylon-free bridge designs are arch spans and suspension bridges. An arch span foot bridge would be higher at the centre than the sides if the arch was to be the footpath. If the arch were to support a 20 metre high path below it, the suspension members would need to be rigid. Such structures are expensive to build. Suspension bridges supported by cables will sway in high winds, alarming pedestrians.

The Practicalities if Footbridges are Mandated (Pedestrian Perspective)

- If a safe but high Immigration Bridge was built, it would not be suitable for use by the elderly or people with disabilities.
- Both of these footbridges would be forbidding places during months of the year when Canberra is subject to cold West winds.
- No matter what design, in the warmer months strong North-westerlies and Westerlies would buffet pedestrians at the proposed site of the Immigration Bridge, as now happens on Commonwealth Bridge.
- Neither bridge is centrally located and they are unlikely to receive regular use.
- During times of little use, such as at night, footbridges would attract skylarkers and vandals.
- As the proposed Immigration footbridge would have to be built a lot higher than now planned, because of its isolated location it would, unfortunately, attract persons contemplating suicide.

Footbridges for Lake Burley Griffin - the Choices

- There is no practical engineering solution to the safety problem for sailing craft presented by the Immigration Bridge plan unless the proponents are willing to build a high, pylon-free and very expensive bridge.
- The Weston Park footbridge proposal would have a major adverse impact on boating traffic in the Western part of LBG.
- The stark choice is really either have water activities on LBG as we have known them for the last 45 years or to have footbridges across the lake. We cannot have both, unless there is a willingness to build high, pylon-free bridges. These would be expensive, most likely eyesores and therefore impractical.
- The small number of people expected to walk over the proposed footbridges has to be balanced against the level of normal activities on LBG's waters. The lake has had year round usage for a wide range of water sports and activities, since it first filled.
- The number of sailors and people engaged in other water sports coming from interstate to Canberra each year would exceed by far the number of tourists who could be expected to make a special trip here just to see a memorial footbridge. A footbridge curtailing sailing and other events would have a long-term, adverse effect on Canberra's tourism industry.

Immigration Monument – Other Possibilities

- The immigration monument does not have to be a bridge. I doubt if the subscribers care what shape the monument takes or even where it is located: Canberra, Sydney or Melbourne would do.
- If the proponents insist on a bridge, then they can build a pond and bridge combined. The proposed footbridge is only 400m long and such a combination would be a lot cheaper to build than an elaborately engineered safe structure across LBG.
- Nerang Pool at Commonwealth Park is longer than 400m along its East to West axis. A sensitively designed footbridge could perhaps be built over it. This would be inexpensive to construct and the location is a well used, protected public place which receives many interstate visitors during Floriade. The bridge could be made even longer if it linked to the existing small North South Nerang Pool footbridge, thus making the Immigration Bridge into a "T" shape.
- Another possibility is an additional footbridge from Aspen Island in Central Basin to Kings Park.
- A "U" shaped shore-to-same shore bridge could be built in either of the little used Central or East basins.
- A large pier could be built in the same locations with name plates around the edges and an immigration feature or café in the middle.
- The immigration monument with nameplates could take other forms, left to the imagination of professional designers with expertise in public spaces.

Lake Burley Griffin - Keeping It and Its Users Alive

- To keep the lake as a living entity, it must be seen from a lake-centric view as well as from the shores. Carving it up into pieces will result in sterile waters similar to those East of Commonwealth Bridge.
- To keep lake users alive, safety is paramount. Nothing should be added to the waters of LBG which compromises safety. Generations of the future will want to be lake users and their numbers can only increase as the rising cost of petrol makes local activities more popular.
- People involved in this Inquiry who are resident in Canberra should be mindful that it might be their children, grandchildren or others they know who may decide they want to take up sailing in the future. I never had to worry about my children getting tangled up in man-made death traps when they learnt to sail, I only had to fuss about sunscreen and life vests.

Recommendations to the Committee

- I strongly suggest that Members of the Committee of Inquiry, particularly those who have little experience of boating sports, engage a motorised vessel to go out on the lake and travel from Commonwealth Bridge to Government House and return, taking a couple of representatives of lake users as guides who will point out the special features of this unique waterway. This would help Members gain a lake-centred perspective which should help their Inquiry.
- I would like to point out a recent publication available from the Canberra Yacht Club entitled "From Lake George to Lake Burley Griffin Canberra's Pioneering Sailors" by Alan Foskett. The book covers the first period of the history of this sport in this area and gives an account of the many colourful and eminent people who contributed to the development of sailing in Canberra.

Note for the Committee

• Should the Committee require any clarification of the points I have made, especially regarding the dangers of the proposed structure, I would be happy to elaborate by means of email, the telephone or in person.

Yours faithfully,

John Holland