## Private Submission on the EIS for CBD and South East Light Rail Project

Whilst it is obvious that transport in Sydney has become less efficient over many years, and attempts to address this are certainly long overdue and worthwhile, I have some concerns regarding aspects of the CBD and South East Light Rail Project. I have some general concerns about the project itself, but also some specific concerns as regards that portion from Moore Park through to Randwick and Kingsford.

My submission has been prepared after reading the initial chapters of the EIS as well as Technical Papers 9 and 10. The perspective I offer is as a professional concerned with urban amenity and quality of life, the provision of green places as part of a livable city and suburbs, and as a current resident of Clovelly.

My concerns are described in the ten points below.

(1) The EIS notes that "Congestion is reducing Sydney's productivity and urban amenity". I fully agree with this statement, but wonder why greater efforts are not being made to attack congestion caused by private motor vehicle use in the Sydney CBD, especially on working week days. After all, it makes sense to deal more directly with all causes of the problem, rather than address just one aspect, which is congestion caused by buses.

Furthermore, there is a comment in the EIS that the Light Rail (along George Street) is likely to shift intersection delays elsewhere, especially to alternative N-S corridors, such as College, Elizabeth and York Streets. This will in no way improve overall congestion in the city.

The Light Rail Project needs to put forward realistic proposals for dealing with this shift in congestion that will impact on other transport corridors in the CBD.

(2) The proposed Light Rail Vehicles carry 300 passengers, of whom 220 are standing and 80 are seated. This means that almost 3/4 (75%) of passengers are expected to stand for their journeys.

The current buses vary in their capacities, but only about 30% of passengers are currently required to stand, whilst the remaining 70% are seated.

Although the EIS makes comments as regards the Light Rail being "more comfortable", as a former bus-commuter to work, I can confidently say that most commuters prefer to sit rather than stand, even for a journey of about 20-25 minutes.

I feel that the 75% standing requirement on the Light Rail vehicles does not take into account the aging population or families with prams, let alone the youngsters of working age who seem to be especially keen on sitting down for the entire length of their journeys.

(3) The EIS seems to imply that the Light Rail is all about shifting people from the south-eastern suburbs off buses and onto the Light Rail, thereby reducing the number of buses from the south-east entering the CBD.

Surely, there should be more of an attempt to shift people from private cars to public transport in general, to travel to the CBD. In the case of the south-eastern suburbs, there should be similar efforts to shift car commuters on to the Light Rail, for trips into the CBD.

However, this is extremely unlikely to occur once the Light Rail is in operation, since people will be able to drive to the CBD, sitting down all the way and along a now less-congested Anzac Parade (with many buses removed). The fact that the Light Rail Vehicles will likely offer a "standing" journey makes such a switch from car to Light Rail less attractive. This is a lost opportunity to attack a fundamental cause of congestion in the CBD.

(4) I am deeply concerned about the permanent loss of the amenity of High Cross Park in Randwick, which is a small green oasis in a heavily built-up area. It will turn into yet another paved-over transit area, with a token number of trees, given the large number of passenger movements across it, between Light Rail Vehicles and connecting buses.

Indeed, it is difficult to claim that it could even remain as a "Park", given the projected very large extent of pedestrian movements in multiple directions.

In an era of increased urbanisation, and the Randwick Council area has certainly seen more than its share of this from the 1960s onwards, we need to be increasing our green breathing spaces,

not reducing them! Furthermore, they need to be found throughout our suburbs, where people experience them, even subliminally, on a day-to-day basis as they go to and from work and school.

The Light Rail Project needs to model the extent of the pedestrian movements and networks of pathways across the park so that we are aware of the full impact on this Park, should this terminus location be adopted.

Realistically, I would urge the Light Rail Project to search for an alternative end-of-line and transfer area in Randwick so that High Cross Park can be retained.

(5) There are some comments in the EIS regarding tree replacement numbers, where trees are removed, at a ratio of 2:1 for small trees removed and 8:1 for large trees removed.

Tree size and tree number are quite different aspects of the urban forest, and planting eight replacement trees to offset the removal of one large tree, whilst admirable in its intent, does not necessarily guarantee the same outcome as regards environmental or human benefits. If the eight trees that are selected as replacement species only grow to be small or medium-sized trees, the benefits of the original large-canopied trees are lost forever.

I would urge the Light Rail Project to ensure that replacement plantings are of similar scale e.g. if large Fig trees (*Ficus macrophylla* or *F. rubiginosa*) are removed in the Moore Park area and along Anzac Parade, that space be allocated during the design process such that similarly large replacement trees can be planted. It is becoming increasingly difficult in cities to find places that can accommodate large trees, given the requirements both underground, for tree root development, and above-ground, for canopy development.

(6) On a related note, it is vital that arborist and landscape architect team members are a fundamental part of the overall (engineering-centred) design team for the Light Rail Project. The landscaping along this project is too important to be done as an "add-on" and would limit the potentially good outcomes that could result if the Project was designed as an integrated "Green Light Rail Corridor".

It is essential to allocate adequate space for trees during the design phase so that design intent as regards tree replacement can actually be achieved via the physical resources (especially space) available to trees.

I did notice that there seemed to be an inconsistency in some of the graphics showing the Light Rail, as regards the absence or presence of trees in the vicinity of the tracks. Some of the earlier descriptions that were more "route-focussed" seemed to lack trees, but a later chapter, that was more "landscape-focussed" (Technical Paper 10), did indeed show trees in "typical street sections" for each part of the route, either as regards retention of existing trees or potential new plantings.

(7) Based on the identified route for the Light Rail, which is east of the current (and to-be-retained) busway, it would appear that a large number of relatively-recently planted, healthy Moreton Bay Figs (*Ficus macrophylla*) will be removed. This avenue was planted (?about 10-12 years ago) as a potential long-term replacement avenue for the Anzac Parade avenue, given the age and condition of the older, original trees. (This newer avenue could be replaced, in turn, by new trees in the current Anzac Parade locations, once these older trees had declined to the point of removal, providing a double-avenue and potential for ongoing, sequential replacement into the future.)

The significance of the original Anzac Parade Fig avenue was noted in Technical Paper 10. Indeed, it is one of the oldest remaining grand avenues in Australia.

I would urge the design team to consider the possibility of relocating the relatively recently-planted, but now quite advanced, healthy trees further to the east, in Moore Park. Given the sandy soil in which they are planted, it should be feasible and cost-effective to dig trenches further to the east of the proposed light rail and move these trees across to new positions. It is likely that the trenches need only be about 2m deep and about as wide as the canopies. The positive design impact of reusing such advanced trees, with already quite large canopies, cannot be overstated.

(When the University of NSW built its swimming pool on the corner of Anzac Parade and High Street in the 1970s, it undertook just such an operation to move a mature fig tree, which survived and prospered in its new location, about 50m south of its original position. This was in the days before all the recent experience the industry has had in transplanting large trees.)

(8) It was interesting, and heartening, to read that 60% of students and staff use public transport to and from the University of NSW. Either these people are environmentally enlightened or cost-conscious. Somewhat alarming was the very low figure of 20% of people using public transport to

travel to the Sydney Cricket Ground (SCG) or Sydney Football Stadium (SFS). Although 55% of people access events at Sydney Olympic Park by public transport, this is via heavy rail, with better connections throughout greater Sydney.

I feel that the Light Rail Project needs to better explain if and how it will be able to lift the 20% public transport usage to travel to the SCG or SFS to something approaching at least 60%.

(9) The cut-and-cover tunnel for the green, recreational areas of Moore Park (west) is a sensible and welcome decision (compared with the alternatives that visually or physically bisect this area).

In a similar vein, I feel the Light Rail Project should adopt the route that provides a deviation through Randwick Racecourse, rather than along Wansey Road, since the latter route requires the removal of many established, large canopied trees. The "deviation through the racecourse", Option 4, "performed well against the criteria" as noted in the EIS but the perceived problem with it was the expense.

It should be remembered that Randwick Racecourse stands to be a big beneficiary of this investment in public transport infrastructure, both for its racing activities and its other ambitions.

The route deviation through the racecourse may well provide an opportunity to further "green" the Light Rail Corridor and should be seen as an investment in the future.

(For the record, I don't live in Wansey Road, don't own property there and don't know anyone who does. The above comment is made purely on a trees / green places / amenity basis.)

(10) I have real concerns that the Light Rail Project is being integrated with Urban Activation Precincts (UAPs) as a justification for it proceeding. It would appear that there is already sufficient demand for better public transport to service the day-to-day residential, working and educational populations in the south-eastern suburbs as they currently exist, let alone the extra transport needs of special events in the vicinity.

There is especially a need for better public transport that is actually used by people who come to events at the Sydney Football Stadium, the Sydney Cricket Ground, Randwick Racecourse and Centennial Park. These events are already occurring on a weekly basis.

The Randwick Council area is 1 council out of 38 in greater Sydney (or 15 in a proposed reduction of council numbers). Yet the Randwick Council area is being asked to accommodate 1/4 of the UAPs (i.e. 2 of the 8 proposed). This is a vastly disproportionate demand on a relatively small area.

Many councils other than Randwick already have excellent public transport via heavy rail access which, as the EIS for the Light Rail Project notes, can carry 1200 people as opposed to 300 people for the proposed Light Rail.

As it stands, the Light Rail Project is untested in terms of its ability to cope with current demand, or demand in 2020, let alone additional demand from proposed increased residential and commercial development.

The Light Rail Project needs to be built and tested at the levels of demand on completion in 2020, without the potentially huge additional demands required by further residential and commercial development.