The Secretary Department of Planning & Environment 320 Pitt Street Sydney NSW 2000

Dear Secretary,

Parramatta Light Rail Stage 1 (SSI 8285)

I write in opposition to the Parramatta Light Rail Stage 1 proposal (SSI 8285). Although I support a light rail network for Parramatta in principle, I do not believe that the proposal before you represents a good transport planning outcome, a good urban design outcome or a good outcome for taxpayers.

Transport for NSW (TfNSW) has failed to provide a serious analysis of feasible alternatives, offering instead a frankly mystifying table of single-mode options for travel within the Greater Parramatta area. The idea that transport investment for a given area should be concentrated on a single mode is nonsense, for at least three reasons:

- Under any plausible scenario, good quality roads and bus services will be required within Greater Parramatta for the foreseeable future. Indeed, such infrastructure will be more important (and more versatile) than TfNSW's proposed light rail network.
- The NSW Government has already committed to WestConnex, Sydney Metro West and new Parramatta River ferries – all doubtless on TfNSW's recommendation – demonstrating that the area requires a multi-modal approach to transport planning.
- While the case for repurposing the Carlingford Line as a light rail track is no doubt strong, the case for a circuitous Parramatta–Westmead link, duplicating existing rail and bus transitway links, is weak. There is no suggestion that the merits of this section of the line were actually assessed.

My submission below address five features of the TfNSW proposal with which I do not agree, and outlines potential solutions for their consideration. The features are:

- single-track section under Pennant Hills Road
- Rydalmere stop location
- Rosehill-Camellia alignment
- alignment beyond North Parramatta
- duplication of the Cumberland Hospital bridge.

A revised line diagram incorporating my suggestions is attached as figure 1.

Pennant Hills Road underbridge

The planned single-track section beneath Pennant Hills Road makes little sense. First, there is no need for an 'active transport' corridor beneath the road – pedestrians and cyclists can use the traffic signals above as they do today. Second, if the shared path really is vital, it's also difficult to see what is so essential about locating the Carlingford stop on the northern, rather than the southern, side of the road.

Carlingford Station is not in the centre of the suburb. A future extension to the network would surely include a station at Carlingford Court; and the scale of investment required to support this would clearly accommodate a remodelled Pennant Hills Road bridge. Until then, commuters parking at Carlingford Station's car park could simply use the shared path to walk to a terminus on the south side of the road.

An interim terminal stop could be provided adjacent to (and named after) K13 Submarine Memorial Park. Pedestrian access would be via the park's circular driveway and Tiptrees Avenue. Carlingford's station building could be demolished and the station's footprint used to provide additional parking.

Rydalmere stop location

TfNSW proposes to replicate the current Rydalmere Station location. This is despite the surrounding industrial and low-density residential land use being ill-suited to mass transit. (A fact reflected in the station's low patronage figures.) I would prefer to see a stop located to the south, adjacent to (and named after) Western Sydney University's Whitlam Library. This would strengthen the connection between the University's Rydalmere and CBD campuses.

TfNSW claims, implausibly, that a Whitlam Library stop would harm endangered ecological communities but that their proposal would not preclude an additional stop in future "should demand provide an opportunity". It is difficult to imagine:

- how a stop could be built in future unless the 'endangered' plants are expected to vacate the site of their own volition either it's a show-stopper or it's not
- how demand could possibly justify a station at the present Rydalmere site today.

At the very least, TfNSW should consider building a very simple, low-cost Rydalmere stop using bus shelters, to minimise the sunk cost if the stop is later moved or another is added nearby.

Rosehill-Camellia alignment

TfNSW considered a number of alignments through Rosehill–Camellia. All of these, however, appear to run to the north of Hassall Street. This approach ignores two important considerations in light rail design:

- sharp turns generate wheel squeal, accelerate asset wear and increase journey times
- stops should be located some distance from natural barriers such as waterways to avoid wasting large sections of the walking catchment.

A better alignment (illustrated in the attached figure 2) would take the line south of Hassall Street, crossing James Ruse Drive at Oak Street, and proceeding along the latter towards the CBD. Although this would necessitate the acquisition of the former Wyeth factory site at Gregory Place and some residential properties, this acquisition would allow for the subsequent expansion of the parkland buffer zones around the historic Hambledon and Experiment Farm cottages.

Stations could be located at Rosehill shops and near Elizabeth Farm.

I agree with TfNSW's conclusion that, ideally, light rail should have a grade-separated crossing over James Ruse Drive. However:

- it is by no means clear that this will be necessary on day one of operation
- given the long-term need to improve pedestrian and local traffic links across James Ruse Drive (i.e., within Greater Parramatta), it would be better to elevate the road between Parramatta River and the crest of the hill at Weston Street.

My view is that the crossing at James Ruse Drive should be at-grade in Stage 1, with the road elevated in future to provide direct pedestrian access between Rosehill shops and Rosehill Gardens.

In the longer term, Oak Street could be re-imagined as a pedestrian mall fringed with higher-density mixed-use buildings between Rosehill Gardens in the east and a parkland and heritage precinct in the west.

Alignment beyond North Parramatta

I have noted above that the proposed link between Factory Street, North Parramatta, and Westmead Station makes little sense from a transport planning perspective.

The transport benefits of the Parramatta North–Westmead section are by no means clear, even allowing for the 2,700 new apartments planned for the Parramatta North 'urban transformation' land. Assuming that the light rail line terminated at Church & Factory streets, all new residents on the Parramatta North site:

- would be within a 10-minute walk of the Factory Street stop
- would be within a 15-minute walk of the southern extent of the Westmead Hospital campus
- would be unlikely to want to travel to Westmead Station, since Parramatta Station would be closer and offer more and more frequent services.

Similarly, customers travelling from the eastern section of the light rail network to Westmead would be more likely to:

- interchange for train or bus transitway services at Parramatta
- in the longer term, use Sydney Metro West services.

The limited benefits of this two-kilometre section of the network should be borne in mind when considering the following:

• the impact of light rail construction and operation on the highly sensitive Parramatta Female Factory site and Parramatta River foreshore

- the limited options for extending the network from a Westmead Station terminus
- the potential benefits of extending the network in future towards Northmead and Baulkham Hills.

The EIS suggests that light rail will offer a journey time between Cumberland and Westmead hospitals of six minutes, claimed to be "15 minutes faster than bus". This claim is nonsense. No bus routes provide a direct path between these stops as there is virtually no demand. Were a bus to service this route along existing streets, the 1.5-kilometre journey might be expected to take as little as three minutes, depending on the number of intermediate stops and traffic conditions. Even if light rail could offer a modest time saving for these trips, the 20-minute walk would be unlikely to deter many commuters.

Impact on Parramatta North heritage and environment

I remain to be convinced that the proposed alignment through the Cumberland Hospital site will not damage or necessitate the removal of the mature trees or important heritage buildings of the Female Factory, Parramatta Asylum or Wisteria Gardens.

Limited options for network expansion

It is difficult to conceive of a future extension beyond a Westmead Station terminus. The only market this could possibly serve is Westmead residents working at Westmead Hospital, surely too small a group to justify anything other than bus services.

Customers travelling from south of Westmead Station to Parramatta, Olympic Park or Sydney City would be better served by trains from Westmead Station or buses from Coleman T-way station.

Potential benefits of extending north

Eleven Hillsbus routes operate between James Ruse Drive and the Parramatta CBD, of which 10 are direct services and the eleventh, 549, operates via the former Parramatta Correctional Centre. Given the high demand for public transport along this corridor, there is a clear case for upgrading from bus to light rail, with an interchange similar to that planned for Kingsford Nine Ways at the northern extent.

Buses no longer required to run along Church Street could then be redeployed to a rerouted and more frequent 609, running from Lake Parramatta Reserve, via the light rail stop at Church & Factory streets, through the Parramatta North site and on to Westmead Station.

A potential alignment north from Parramatta Square, with indicative stop locations, is shown below and in the attached figure 1. I suggest that Stage 1 terminates south of the James Ruse Drive interchange. This would facilitate a later extension north to Baulkham Hills, broadly following the alignment of the former Rogans Hill steam tramway.

Stage	Stop	Nearest intersection
Stage 1 proposed	Parramatta Square	Macquar e & Sm th streets
	Eat Street	Church & George streets
	Pr nce A fred Square	Church Street & V ctor a Road
	Fenne Street	Church & Fenne streets
	Factory Street	Church & Factory streets
Stage 1 a ternat ve	Barney Street	Church & Barney streets
	Northmead	Church Street & James Ruse Dr ve
Future stage	Moxham	W ndsor & Moxhams Road
	Mode Farms	W ndsor & Mode Farms roads
	Junct on	W ndsor Road & H s Motorway
	Bau kham H s	W ndsor & O d Northern roads

Cumberland Hospital bridge

Should TfNSW proceed with the North Parramatta to Westmead link as proposed, the question of how to cross the Parramatta River will need to be addressed. TfNSW has correctly identified that the existing bridge alignment is ideal for this purpose. Given the exceptional heritage significance of the Parramatta Asylum, Female Factory and former Girls' Home sites on the eastern bank and Wisteria Gardens on the west, it is crucial that existing thoroughfares be used wherever possible.

I understand from the EIS that NSW Health has determined it cannot cope without the bridge being open during light rail construction. There is no reason to believe that this represents a genuine need – after all, the eastern campus of Cumberland 'Hospital' is now home to just a handful of actual patients. Most of the site is offices and derelict buildings.

Even if there *is* a frequent need to whisk patients from the Bunya Unit to the emergency room at Westmead at speeds that cannot be accomplished on the surrounding road network, one must also consider the fact that the NSW Government plans to close the entire eastern half of the campus anyway, to facilitate the Parramatta North Urban Transformation.

If indulged, Health's intransigence will deliver a sub-optimal bridge alignment for the life of the asset (perhaps up to a century) to benefit operations at a tiny 'hospital' that will be closed within a few years.

A compromise solution would be to simply defer the section of the line beyond, say, Factory Street, build an extra turnback, and await the closure of Cumberland Hospital before proceeding. Thank you for considering my submission.

Yours sincerely,





Stage 1 shown in red. Future stages shown in grey.

Figure 2. Preferred Rosehill-Camellia alignment

