Alternative/modification to Western Harbour Crossing – Beaches Road Tunnel Link Date: 10 Feb 2021 (updated 11 Feb)

## A. North-south Connection

- Given the potential increase in traffic with a rising population the Western Harbour Crossing connection with the Warringah/Gore Hill Expressway is unsustainable as the number of accidents (impacting on road safety and delay) will increase over time (refer to Figure 1 attached).
- 2. The standard of motorway design on the north side is not compatible with the high standards adopted for Westconnex on the south side of the Harbour. An example from the south side being the Rozelle Interchange (refer to Figure 2 attached).
- 3. The current proposal, while it in part addresses the north-south traffic, it does not extend sufficiently north to Chatswood and the Pacific Highway. Our proposal would strategically locate on-and-off ramps along its length.
- 4. Chatswood is expected to have significant employment growth of 38% by 2031, from a current base of 95,000(2015 study) to 130,000 workers. Chatswood is both a very significant traffic generator/attractor and has increasing traffic congestion problems (both north-south and east west).

#### **B.** East-west Connection

- 5. Boundary St (Chatswood)/Warringah Road are currently the main east-west arterial roads bringing traffic into the Northern Beaches (2014 report, at 80,000 vehicles per day) and the route should continue to be improved. The NSW Government has already spent \$600m on road works on Warringah Road, grade separating Forest Way and Wakehurst Parkway in Frenchs Forest and increasing the railway bridge span over Boundary Street.
- 6. An east-west tunnel from the west side of the Roseville Bridge to Dehli Road, Ryde and connecting with the Sydney Orbital is a logical route given the current and future growth of Western Sydney to improve east-west traffic flow.
- 7. The Beaches Road Tunnel Link(BRTL) entry and exits are at the south end of the northern beaches and with the "double toll" (BRTL and Lane Cove Tunnels) and extra travel distance and time is unlikely to attract east-west traffic from most of the Northern Beaches. Note also the pinch point at the east portals of the LCT, only 2 lanes.
- 8. Without an east-west tunnel the rabbit runs and traffic on Dehli Road west of the Pacific Highway will continue to be used together with the long route to Macquarie and Lane Cove Road etc via Forest Way/Mona Vale Road to the north of Warringah Road.

### C. Alternative Route - Plan

- 9. The attached concept plan is an alternative to the current Government proposal, and it has been developed to address the issues raised above (refer to Figure 3 attached).
- 10. The outcome of this short paper is to persuade the WHC/BRTL team to assess this alternative given the billions of dollars involved in projects of this type and the problems, in my opinion, that have been highlighted with the current proposal.
- 11. The combined north-south and east-west tunnel is designed to direct as much traffic as possible into/from the Westconnex network on the south side of the harbour.
- 12. Please also refer to Figure 4 and the notes. This is the 1969 DMR concept for the BRTL.

## Figure 1 Traffic Accidents Summary - reported by police for each Road Corridor, over 5 year period 2014-2018



Slide prepared by E J Nye & Associates Pty Ltd – 24 Jan 2021



Figure 2 – Westconnex - Rozelle Interchange (these are all tunnels -around 20km of them) except for lower centre and lower right)

## Figure 3

North portal of WHC - Westconnex (connecting to the Pacific Highway between Chatswood and Mona Vale Road) \$600m upgrade Warringah Rd Frenchs Forest

**Roseville Bridge** 

Chatswood

Macquarie

Strategically located on/off ramps along its length where required.

North Sydney

Warringah/Gore Hill Expressway (completely by-passed by the WHC)

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E J Nye & Associates Pty Ltd Date: 10 Feb 2021

Alternative to the current Transport for NSW proposal Western Harbour Crossing(WHC) alignment with no Beaches Link Tunnel

Brookvale

Manly

Major Interchanges (roads/tunnels)

## **New East-West Tunnel**

From the Roseville Bridge the tunnel traverses under Boundary St, the Pacific Hwy to Delhi Road, connects to Sydney Orbital at Macquarie.

**Proposed Alignment of the WHC** 

Unchanged alignment across Sydney Harbour, traverse underground along the west side of North Sydney with both exit and entry portals north of Chatswood. Interconnection with East-West tunnel.

1. Upgrade Wakehurst Parkway.

- 2. Grade separate Warringah and Pittwater Road.
- 3. Grade separate Manly and Sydney Road.

Rozelle Interchange (under construction)



# EXPRESSWAY

YDNEY

The DMR – "1969" concept of a northern beaches road link (with a bridge over middle harbour) has the same form as the currently proposed BLRT (in 2021).

Since this original 1969 DMR concept was developed we have had the Sydney Harbour Tunnel constructed (and opened in 1992) and the development of the Westconnex project, including the proposed Western Harbour Crossing. Together with Chatswood's status as a regional satellite city and with its expected high growth following the completion of the Sydney Metro (beyond 2024), which had not even been conceived of in 1969. It might fairly be concluded that for the planning of the both the WHC and the BLRT there has been no new thinking applied beyond the 50 year old DMR's basic concept shown on this original graphic.