**Introduction**

This document is intended to discuss the major concerns by RUANELA with the existing North East Link Project reference design as relating to the federal electorate of Menzies. These fall into the four categories of Noise, Transport, Air Pollution and Layout.

The proposed measures to mitigate these are:

- **Noise**: Consistent 10m noise walls at the Bulleen interchange
- **Pollution**: Filters on the tunnel exhaust stacks
- **Layout**: The implementation of the O’Brien design at the southern interchange.

**Noise**

The noise attenuation of the NELP reference design is stated as being based on the 63dBA VicRoads noise policy. This method of noise regulation is appropriate for relatively static background noise such as the droning noise of a freeway. However, it largely ignores the spikes in noise caused by truck exhaust braking.

The elevated ramp interchange at Bulleen will result in frequent truck braking and accelerating noises. Residents are left effectively unprotected from this noise. The proposed noise barriers on the interchange are 4m Perspex. This is of minimal value as the exhaust pipes of large trucks are often already 4m high. With the present design, the worst of these appears to be the citybound ramp.

Excessive vehicle noise is unavoidable due to the placement of traffic lights near the point at which the NEL citybound ramp joins the Eastern Fwy. This ensures sustained loud exhaust braking as trucks brake whilst going downhill over a distance of around 500m alongside regular car and motorbike braking and acceleration.

This is made worse by the elevated nature of the noise. The elevated ramps are up to 15m above the existing freeway surface level. None of the NELP proposed noise barriers are of this height.

NELP proposes to increase the surface level of the Eastern Freeway by around 1m in many places. This reduces the effective height of noise barriers by that same 1m amount.

There are also areas of elevated ‘sky-road’ around the Eastern Fwy/Elgar Rd intersection. These aren’t regular onramps, but continuous elevated freeway, similar to the Westgate Freeway around South Wharf in inner Melbourne. These will cause similar noise issues as the Bulleen interchange.

**Noise Mitigation Measure:**

**Higher Noise Walls**

RUANELA requests that all noise walls adjacent to the interchange be constructed at a minimum of 10m height. Where overshadowing is of concern, opaque Perspex may be used. Noise walls of this
height are already included in the NEL reference design and should be applied in all areas where the interchange comes close to residences.

As an alternative, a sound tube style arrangement may be used, similar to the one installed on the Bolte Bridge in Flemington.

Figure 1. Example of Existing and NELP proposed noise wall heights.
Transport

Menzies will suffer a significant loss of access to the proposed Doncaster rail line, with its easement being paved over for extra lanes on the Eastern Freeway. The Bulleen ‘park and ride’ is of very little use. With the demolition of the Boroondara tennis centre, there is no drawcard to bring people to the area. Since the 305 and 905 SMART busses already run down Thompson’s rd, for those commuting to the city there is no reason that anyone would get in their car to drive to a park and ride when the same bus already runs within walking distance of their house.

The permanent removal of Doncaster rail ever being built also prevents the de-congestion of the Eastern Fwy, Hoddle St intersection. With people being forced to drive to the city due to a lack of a public transport alternative, the Eastern Fwy city end becomes an unsolvable, clogged road. This is further worsened by the traffic from the northern suburbs which will use North East Link to access Hoddle St and the inner city.
Mitigating measure

The Doncaster rail easement must be preserved and not paved over, allowing it to be constructed in future.

AIR POLLUTION

At present, the NELP reference design does not include filters on the tunnel exhaust stacks, but requires the exhaust stacks allow for future installation of filters. The Bulleen area already regularly exceeds EPA air pollution standards. The recent extension of the NEL tunnels in Watsonia will create a greater catchment of vehicle emissions that will be coming out of the Bulleen exhaust stack. This is due to it being the only exhaust stack for the southbound tunnel. The exhaust from 6km worth of
vehicles will all be dumped on Bulleen. This exceeds the amount covered in the Environmental Effects Statement.

Air Pollution Mitigation Measure:

Exhaust stack filters.

RUANELA requests that these filters be installed prior to the opening of the NELP tunnels to traffic.

LAYOUT

The NELP reference design shows all four ramps of the NELP southern interchange as being overhead. The alternate O’Brien design places three of these in a trench (no tunnel extension required), significantly reducing noise and visual impact of the interchange. The O’Brien design fits within the existing NELP defined project area. Note the contrast between the size of the proposed interchanges by O’Brien (fig 5A and 5B) and by NELP (fig 6).

RUANELA participates in the Community Liaison Group (Southern) meetings. NELP was queried if the NEL early works (asset relocation) would allow for the O’Brien design to be built. NELP responded that they do allow for this. Recent updates (November 2021) have shown that the O’Brien design has been ignored.

In their final report to the Environmental Effects Statement hearings, the Independent Advisory Committee recommended that alternate designs (such as O’Brien) be considered for the project.

The O’Brien model preserves the Boroondara tennis centre largely in place. If this is not achieved by NELP, the tennis centre should be relocated to the Bulleen industrial estate once NEL construction of that part of the project is complete.

Layout Mitigation Measure:

The O’Brien Design.

RUANELA requests that the O’Brien design be implemented as the design for NEL.
Figure 5A. O’Brien Design

Figure 5B. O’Brien Design
Figure 6. Overlay showing sheer size and impact of Bulleen Interchange