Fauna Connectivity and the Frankston Bypass (Peninsula Link) project, Melbourne, Victoria.

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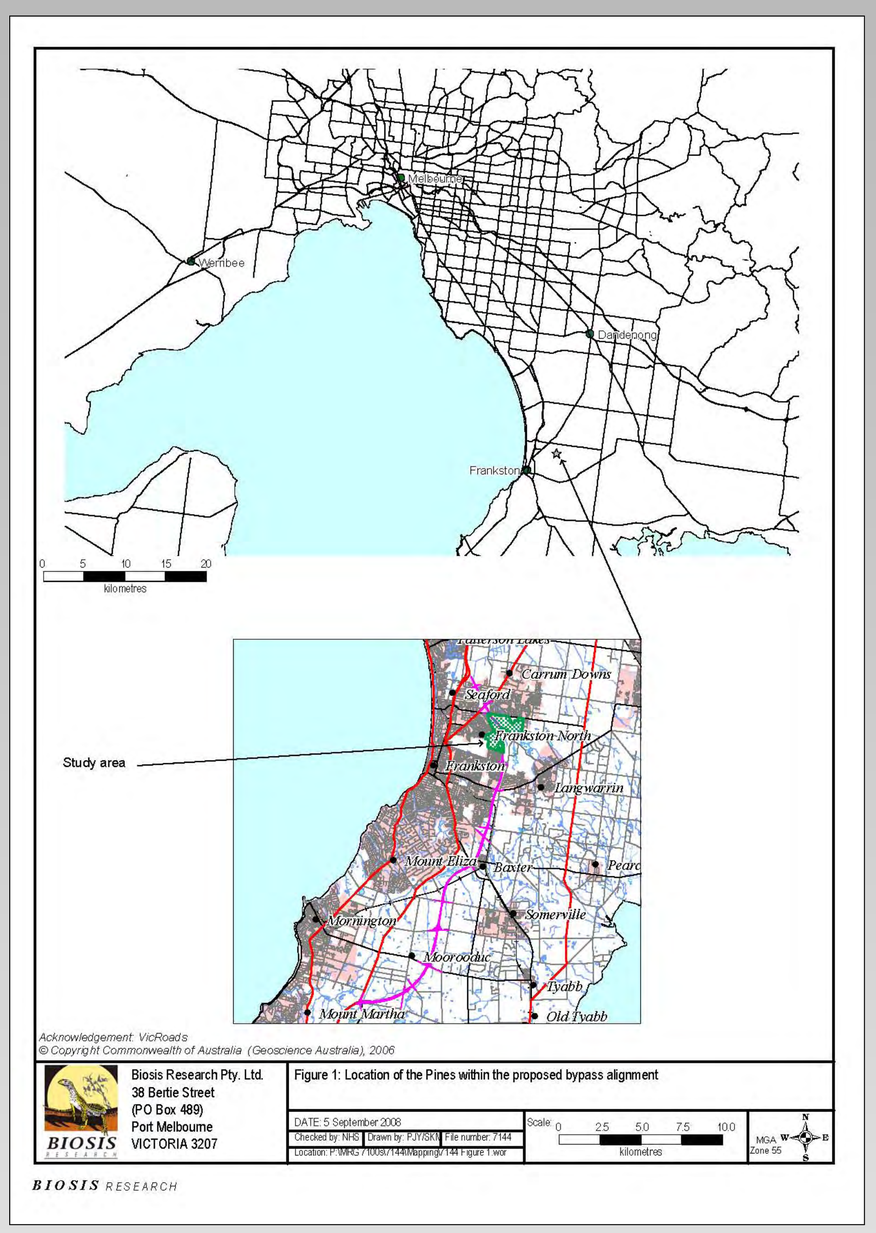
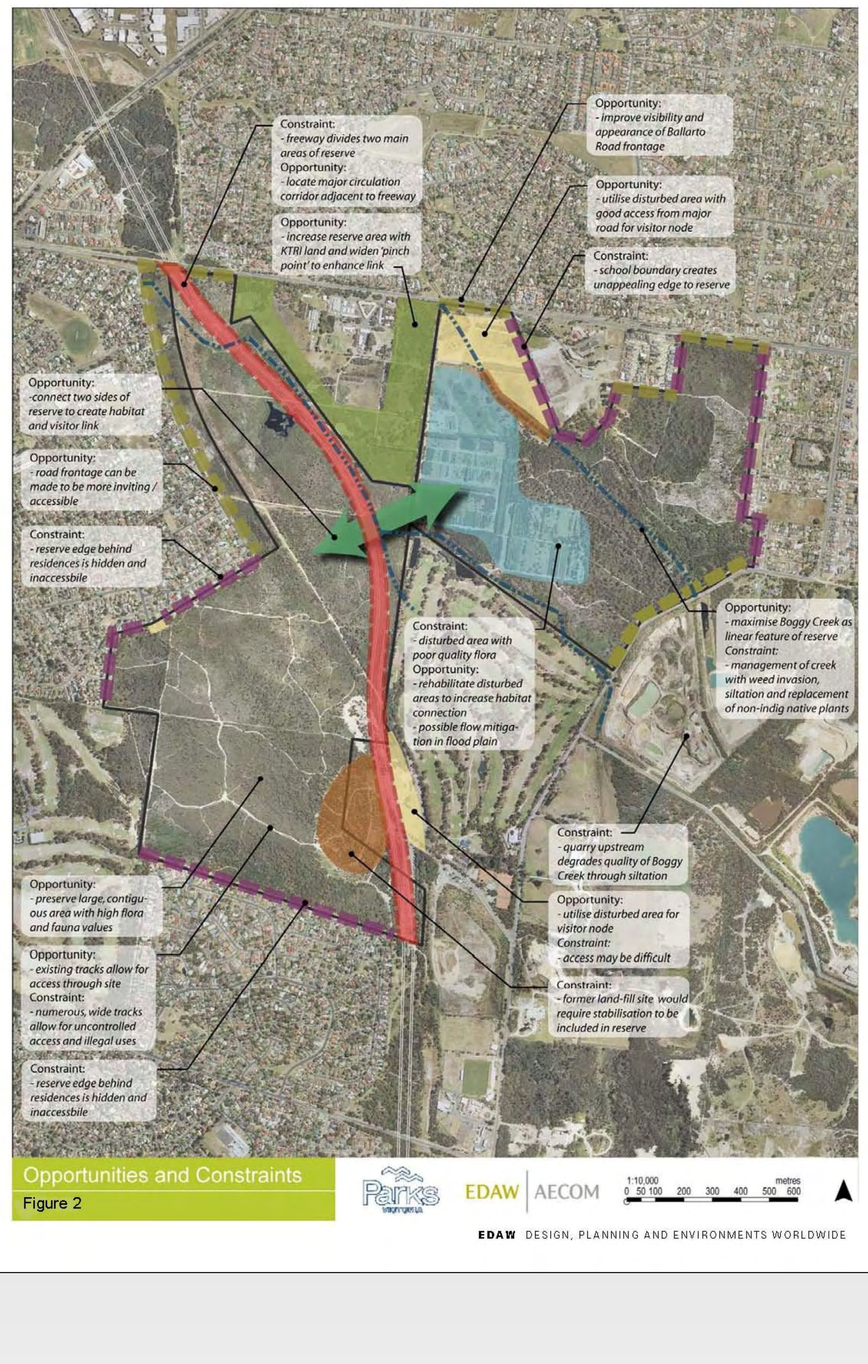
1. The Project:

- The proposed Frankston Bypass will link to the existing Mornington Peninsula Freeway/EastLink connection and reconnect with the Moorooduc Hwy at Mount Martha, Victoria (Fig 1).
- The project has recently received state government approval.



2. Barriers to movement:

- The majority of fauna habitat within the road reservation is found in the northern section.
- The Pines Flora and Fauna Reserve (Fig 1 & 2) and other large patches of indigenous vegetation provide linkages to other patches of surrounding habitat and will be fragmented by the Freeway.
- The road will create a barrier to fauna movement in these areas.
- The green arrow in Figure 2 represents current likely movement of terrestrial fauna that will need to be maintained within The Pines Flora and Fauna Reserve.



3. Retaining connectivity:

- Fauna habitat connectivity has been a key focus of the project within The Pines Flora and Fauna Reserve, where a known population of the nationally significant Southern Brown Bandicoot *Isoodon obesulus obesulus* (Fig 3) exists.
- The bandicoot population is likely to be small and as such will be very susceptible to any negative impacts from road development.
- The reserve also provides habitat for a range of fauna once found more widely on the Mornington Peninsula.

Figure 3 : Southern Brown Bandicoot at the nearby Cranbourne Botanic Gardens.

4. Underpass design:

- Construction of a road tunnel was considered too costly by proponent.
- A bridge underpass will be constructed to maintain connectivity across the roadway (Fig 4.1 & 4.2) for a range of fauna.
- A land bridge was not progressed as it could not be shown that land bridges have been used by bandicoots and cost was also a concern for proponent.
- A series of fauna culverts will also be constructed within the 'connectivity zone' specifically to cater for movement of Southern Brown Bandicoot.
- Culverts have been known to be used by bandicoots in other parts of Australia.
- 'Fauna furniture' and rope bridges will be provided in the underpass/culverts to encourage safe passage.
- Fencing designed to funnel fauna into crossing structures.

5. Ongoing work:

- Population survey and PVA analysis to be conducted prior to construction.
- Design pre and post construction monitoring to allow assessment of ongoing population viability.
- Monitoring 5-10 years post construction.
- Increase predator control program.
- Habitat restoration in adjacent reclaimed orchards.
- Effectiveness of mitigation structures to be assessed against ability to maintain population, not just successful passage.

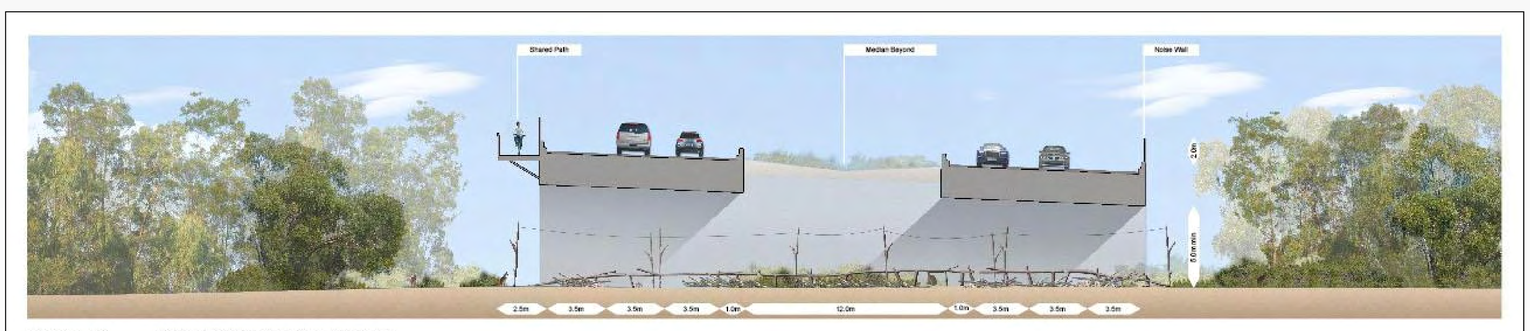


Figure 4.1 Cross Section at Fauna Crossing

Figure 4.2 Elevation at Fauna Crossing

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0 1 2 4 6 8 10 meters

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Southern and Eastern Integrated Transport Authority