

From vehicle underpass to fauna crossing

A study of fauna usage of an existing vehicle underpass and recommendations for conversion to a fauna crossing

Conics has undertaken investigations for a proposed development site in south east Queensland. Despite extensive disturbances resulting from historical land management, the site retains patches of well vegetated habitats including open-forests, wetlands and regrowth. Conics has previously flora and fauna surveys on the site and identified the need for a variety of mitigation measures to minimise the impacts on the sites diverse fauna population arising from the proposed development.

A key recommendation for the development was the provision of a wildlife corridor within the design to facilitate ongoing ecological processes. The site intersects several ecological barriers including a busy road. An existing vehicle underpass was therefore identified as a key feature of the wildlife corridor to facilitate safe fauna crossings.

A study was undertaken to identify species currently utilising the vehicle underpass and surrounding habitat in order to guide specific recommendations for the retrofit of the underpass and associated fauna crossing solutions. This will also provide baseline data for future monitoring of the success of the underpass.



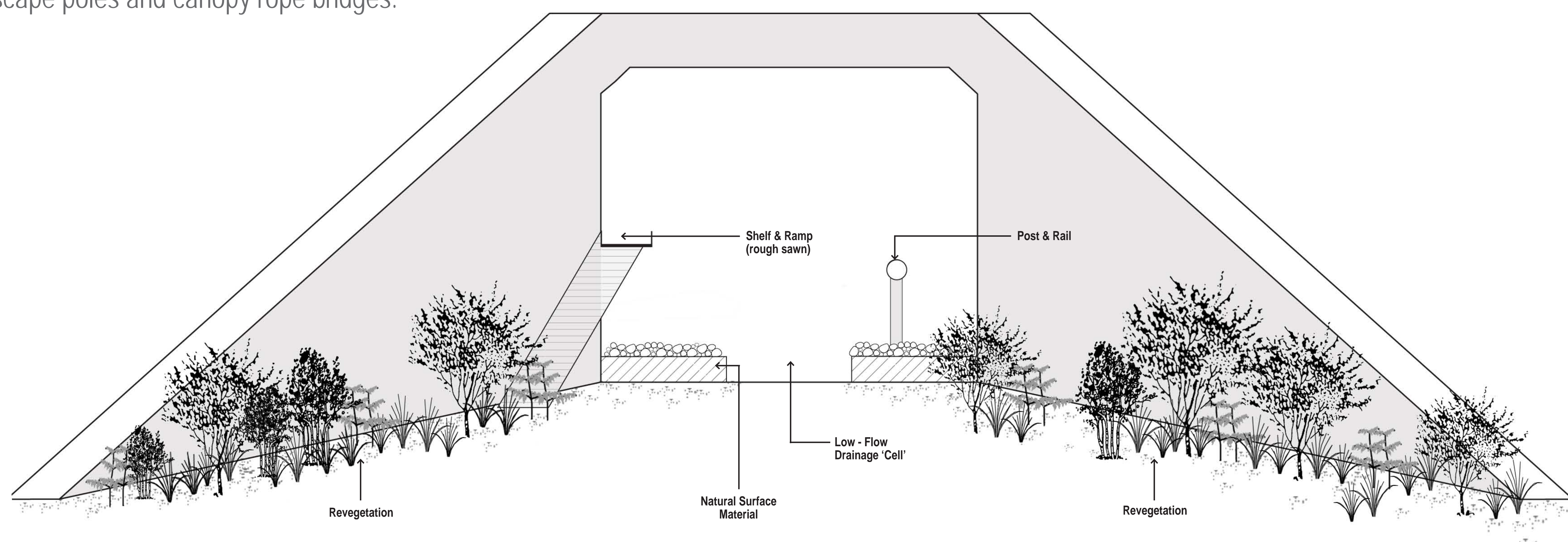
Key Findings

The survey indicated that the underpass is currently largely unused by the native species present in the surrounding area. We identified that many small terrestrial fauna species were entering the underpass, turning around and exiting without making complete crossings.

A variety of recommendations were identified to ensure that the proposed crossing will effectively facilitate fauna movements and reduce the impacts of the development on local biodiversity. These include:

- Installing 'fauna furniture' to encourage fauna movement as well as reducing the size of the underpass
- Providing for dry passage through the underpass including raised ledges and shelves as well as channelling stormwater through a 'wet cell'
- Using a natural flooring of rocks, dirt and sediments
- Providing an extension of habitat with native vegetation near the entrances

Additional recommendations included a range of mitigation measures for the road crossing such as exclusion fencing, refuge poles, glider poles, escape poles and canopy rope bridges.



For further information, please contact:
Brad Dreis, Senior Ecologist
Phone: 07 3237 8899
Email: brad.dreis@conics.com.au