

# WATCH HERE TO LEARN MORE

Key design considerations of Compact Roundabouts





## WHAT ARE THEY?

Compact roundabouts feature a smaller central island compared to traditional roundabouts, allowing for a more space-efficient design.

Compact roundabouts incorporate raised safety platforms to reduce vehicle speeds. These platforms remove the need for reverse curves on the approach to the roundabout; further reducing the footprint of the roundabout.





Reduced construction footprint reducing earthworks, service relocation scope, civil works, native vegetation and cultural heritage impact as well as land acquisition



The reductions listed above also result in lower project costs - generating higher cost-benefit ratios



Manages vehicle operating speeds using vertical deflection (raised platforms) rather than horizontal deflection (reverse curves)







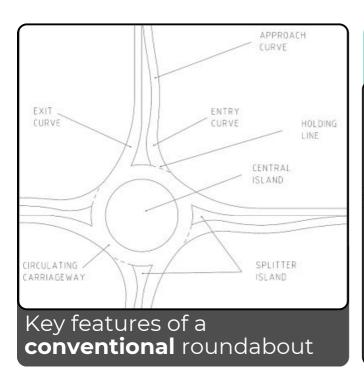


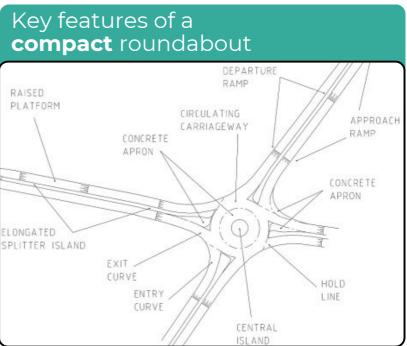






## WHAT DO THEY LOOK LIKE?





The above figures show compact roundabouts in a *rural environment*. However, compact roundabouts can also be installed within *urban environments*, **click the map icon** for an example.

#### **KEY CONSIDERATIONS**



Excess noise may be generated by vehicles traversing the vertical deflection



Existing topography and crossfalls may render raised platforms unsuitable



Traffic modelling may indicate the compact roundabout will not perform satisfactorily















# EXAMPLES / FURTHER READING

### **VIDEOS:**

- Video of urban (Mildura) compact roundabout operation
- <u>Video of rural (Tarwin Lower)</u>
  <u>compact roundabout</u>
- Video explanation of compact roundabouts

### **GUIDANCE / NOTES:**

- Road Design Note Compact
  Roundabouts in Rural High Speed Environments
- Road Design Note Raised Safety
  Platforms
- ARRB Evaluation of the effectiveness of compact roundabout





The example urban compact roundabout was constructed within 5 days for less than \$50k.

# MORE INFO?

We're here to help.

### Contact:

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