

Summary

In general, interchange design seems adequate, but not particularly sensitive to local usage patterns. The designs look like they were created by people who know their road design better than they know Coffs Harbour.

The three weakest points in the interchange design are (1) a lack of access for the identified future growth area of North Boambee Valley, (2) the failure to address the known issue of access to the Isles Drive Industrial Estate for northbound B-doubles, and (3) the provision of a service road in Korora that may provide some staging benefits during construction, but serves no properties, and provides no real long-term benefit.

As well as these major issues, there are many aspects of the interchanges which seem to be ripe for improvement. The Coramba Rd interchange is unnecessarily fussy. The Korora interchange even more so, with conflicting design elements such as the large loop on the northbound off ramp (seemingly added to preserve free flow in a prior design) now leading to a signalised intersection and a roundabout that disrupt free flow access to Coffs Harbour.

A review of the interchange designs, which were unchanged between the Preferred Concept Design and the EIS, would seem to be worthwhile. Some specific suggestions follow below.

Englands Rd interchange

Weaknesses:

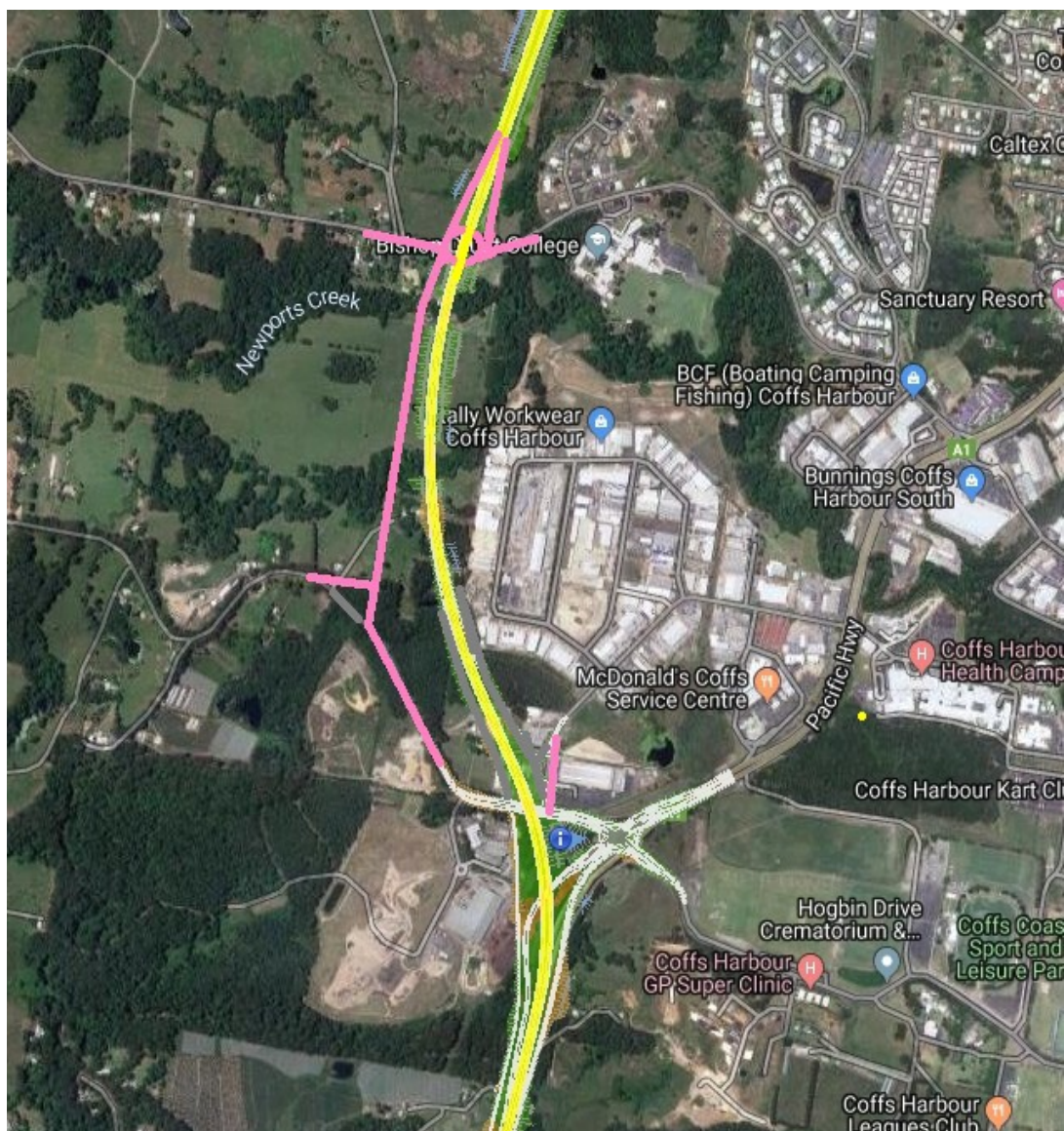
- Lack of access to N Boambee Valley future growth area / Bishop Druitt College
- Lack of access to Isles Drive industrial estate for northbound B-doubles (which can't turn left at the Hospital lights, and must currently access Isles Drive from Englands Rd, which the proposed bypass design prevents).

Alternative:

- Move north-facing ramps to North Boambee Rd
- Provide 2-lane service road west of bypass (Stadium Drive extension) along the eastern portion of Englands Rd, then the eastern boundary of 110 Englands Rd
- Englands Rd terminates at T-intersection with extended Stadium Drive near current 102 Englands Rd
- Isles Dr T-intersection retained and upgraded with turning lanes.

Benefits:

- Retains access to Isles Drive industrial estate for northbound B-doubles
- Provides far superior connection between Bishop Druitt College and West Coffs / Orara valley / Northern beaches for both school buses and those driving to the school
- Provides efficient northbound and southbound access for future North Boambee Valley development.



Coramba Rd interchange

Alternative:

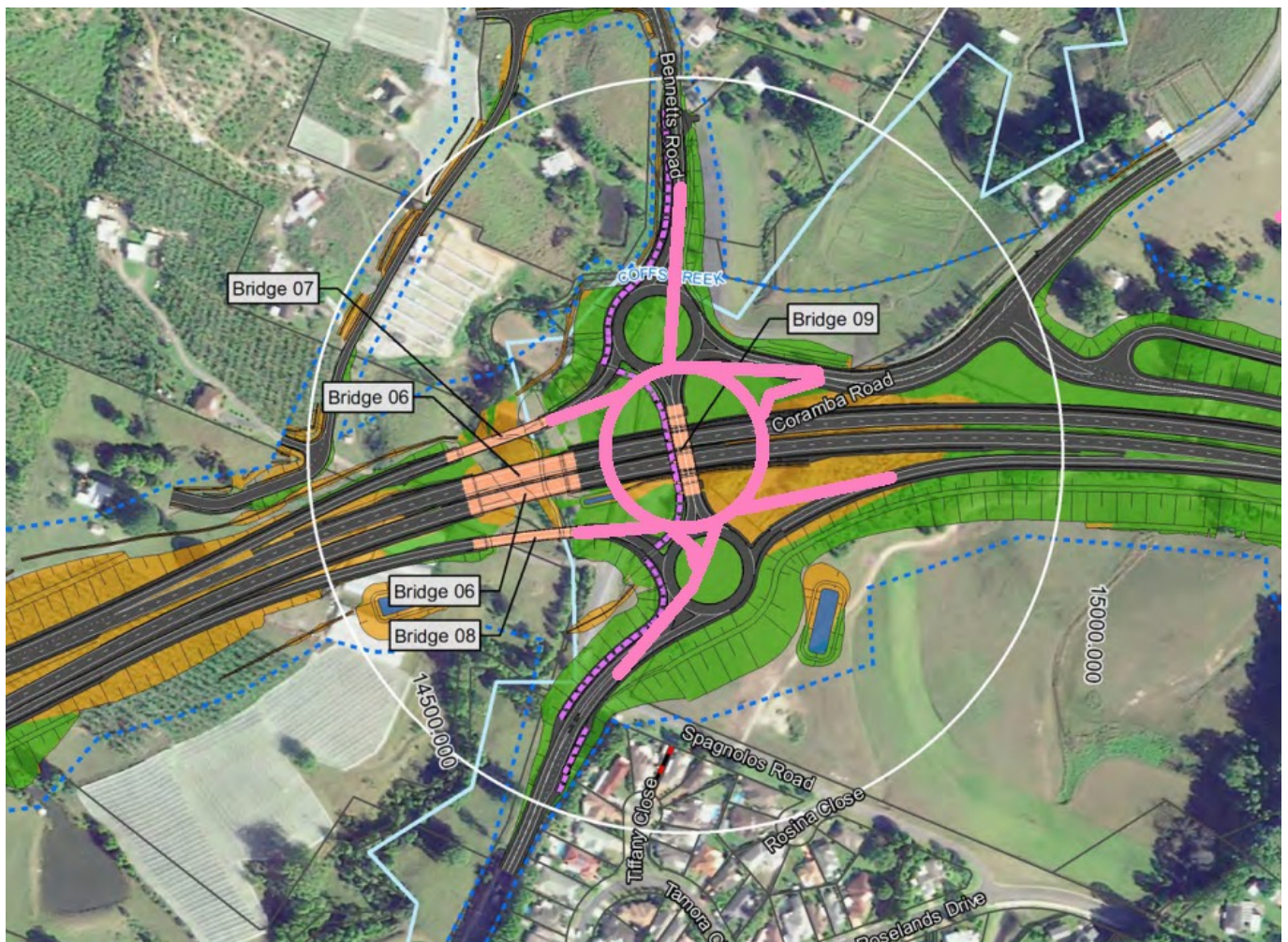
- Single roundabout over bypass, similar to both Pacific Highway interchanges at Port Macquarie, southern Taree interchange, or northern Bulahdelah interchange.
- Northbound on-ramp retained as separate intersection with Coramba Rd west of roundabout.

Benefits:

- Improved traffic flow along Coramba Rd in both directions
- Reduced interchange footprint increases size of buffer to residential areas.

Issues created:

- Access to Bennetts Rd from Coramba Rd eastbound now requires crossing the bypass twice. Very low traffic volumes affected.



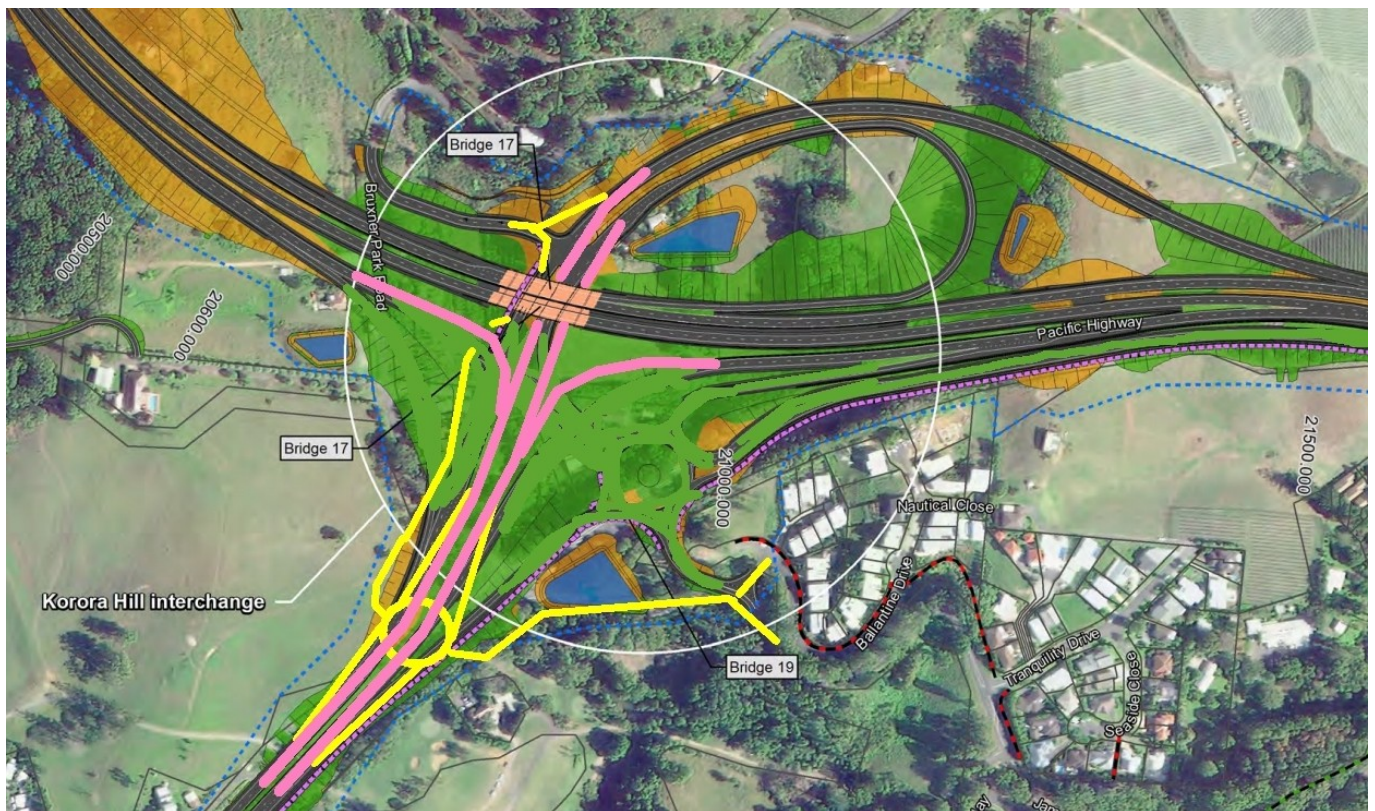
Korora Hill interchange

Weakness:

- Signalised intersections disrupt free flow, especially for northbound traffic entering motorway from Coffs Harbour
- Locating the tie-in to local roads (Bruxner Park Rd and James Small Dr (south)) within the on/off-ramp area forces unnecessarily duplicated access to on-off ramps

Alternative:

- Free flowing dual carriageway for Old Pacific Highway
- Keep divergence of on/off-ramps as far north as possible
- Construct an interchange similar to Arthur St/Mastracolas Rd under (or over) the Old Pacific Highway just south of the current intersection to provide access to James Small Drive (south) and Bruxner Park Rd (via a new service road west of the Old Pacific Highway).
- Remove service road (see below); or retain and tie in to James Small Drive (south)



Sapphire / Korora

Weaknesses of service road:

- Does not service any properties,
- Necessitates replacement of Luke Bowen footbridge,
- Adds complexity to Korora interchange.

Alternative:

- South-facing ramps at James Small Drive (north) / Old Coast Rd to replace service road

Benefits:

- Cost saving of retaining existing Luke Bowen footbridge
- Cost saving of retaining existing highway carriageways over Korora Hill
- Cost saving of not building service road
- Reduced complexity of Korora interchange
- Reduced travel time between Coffs Harbour and Opal Cove / South Sapphire Beach / Korora Basin (including squash and swim centre)

Issues created:

- Loss of staging options that used service road as a diversion during construction (possibly no longer needed after redesign of Korora interchange)



Second alternative:

- South-facing ramps at James Small Drive (north) / Old Coast Rd, and also
- Put new highway on viaduct from Luke Bowen Footbridge to northern tie-in, and use old highway for local access.

Benefits of second alternative:

- Better vertical alignment
- Properties on western side of highway at Sapphire Beach less alienated by new motorway at ground level

Issues created by second alternative:

- Could be difficult to route highway traffic during construction.