

30. Outstanding issues

30.1 Previous outstanding issues

Previous outstanding issues from the 20 per cent concept design review and their resolutions are shown in Table 30-1. The items in this table have been resolved as indicated in the previous resolution column, any outstanding issue

Table 30-1 Previous issues raised during the 20 per cent Concept Design Review Workshop and their resolutions

Issue No	Issue description	Previous resolution
1	Consider footpath/bike path road improvements to Eggins Drive since it will be used as alternate route.	Shared pedestrian / cycle way documented on plans.
3	Check gradeline across Corindi Creek floodplain - rationalise property underpasses and height requirements	Original three property underpasses rationalised to one.
4	Assess cost differential between refined orange option vs orange option with one carriageway?	<p>The possibility of constructing one carriageway in Section B/C was assessed. Whilst a benefit would be achieved in terms of cost savings, this was not seen to be desirable due to other impacts on highway usage. The construction of only one carriageway would cause carriageway separation of up to 800m thereby eliminating the possibility of carriageway switches in an emergency. In addition, access for local road users would be restricted to the southbound direction only, causing long detours in a round trip. Finally, the major cutting in Dirty Creek Range would need to be fully constructed or would require major rework if and when the second carriageway is constructed.</p> <p>Notwithstanding these considerations, and depending on funding and staging considerations the highway may constructed on the western (refined orange) for the northbound carriageway in the first instance, with southbound traffic using the existing highway.</p>

Issue No	Issue description	Previous resolution
5	<p>Gradeline / climb up Dirty Creek Range:</p> <p>Review two gradelines for 100 km/h and 110 km/h for each climbing each climbing section. We assume new highway will meet range road at grade (fixed constraint?)</p> <p>Assess fill balance / imbalance impacts.</p> <p>Assess cost impacts.</p> <p>Assess sight distance impacts.</p> <p>Assess vehicle operating cost impacts for the whole climb.</p> <p>Assess other Pacific Hwy projects max. grade (grade and length of grade) such that it is consistent with other projects.</p>	<p>An assessment of the gradeline up Dirty Creek Range has been carried out. The impacts on fill balance, construction costs, vehicle operating costs and sight distance were taken into consideration. Following the assessment, the following gradeline has adopted for the concept design:</p> <p>100 km/h grade line adopted for crest at Ch 13,600. This allows closer alignment to existing highway and reuse of existing pavement and formation.</p> <p>110 km/h grade line retained for both crests in Section C. This may be reviewed at a later stage subject to funding and staging considerations.</p>
6	<p>Assess whether any treatment required at Rediger Close / Grays Road median (four way intersection).</p>	<p>Four-way intersection to remain in current configuration. This has now been adjusted to closure of median with left in/left out only for Greys Road and Rediger Close. .Refer Section 3.4.2 of this report.</p>
7	<p>Confirm access road from McPhillips road on eastern side of highway in an arterial road scenario.</p>	<p>Confirmed.</p>
8	<p>Rest area strategy to be confirmed, and a decision made on whether any rest areas would be included in the Woolgoolga to Wells Crossing Project.</p>	<p>No rest areas to be provided in the Woolgoolga to Wells Crossing Project. (This action has since been altered by the addition of a rest stop at Arrawarra interchange as part of the Sapphire to Woolgoolga project, retention of the existing southbound rest stop at Lemon tree Road and the reconstruction of the northbound rest stop at Lemon Tree Road which includes a pedestrian underpass/overbridge).</p>
9	<p>Look at RTA policy on access limitations for 110 km/h speed zoning.</p>	<p>RTA policy reviewed. The number of highway accesses has been substantially reduced in the development of the design. The number of accesses now complies with the access limitations for 110 km/h speed zoning.</p>
10	<p>Confirm that alignment north of Wells Crossing minimises impact on Wells Crossing Flora Reserve.</p>	<p>Confirmed. The alignment has been placed as close to the existing highway as possible to ensure that impacts on the Flora Reserve are minimised.</p>
11	<p>Consider denying access to Bananacoast Towing from highway - buy additional land for access to Parker Road.</p>	<p>No longer an issue as the existing highway will be a service road with two new carriageways to be constructed.</p>

Issue No	Issue description	Previous resolution
12	Confirm tenure of land for proposed access road north of Luthers Road.	Land for proposed access is State Conservation Area. The design for the access road has been changed. The proposed access road will now be parallel to the highway on the eastern side.
13	Confirm tie-in with the Wells Crossing to Iluka Road project.	Confirmed following meeting with Wells Crossing to Iluka project team on 1 August 2007.
14	Consider combining left turn movement into Lemon Tree Road with access road servicing properties north of Lemon Tree Road?	The combination of movements at Lemon Tree Road has been examined in detail. Refer design drawings.
15	Consider distance / offset of proposed seagull intersections Luthers Road and Kungala Road.	Distance between intersections too short. Luthers Road is to be realigned 600 m further to the north to provide for appropriate distance to avoid weaving.
16	Consider rationalising direct access points with access road for properties on western side of highway north of Luthers Road.	Direct access points rationalised to one left in / left out at this location.
17	Range Road - consider other locations for underpass / overbridge that are square with new highway to minimise length of structure, eg chainage 10,600 to 11,200, if built clear of existing highway - reduce constructability issues. North facing ramps at Range Road in class A.	Alternative options for the overpass at range road have been investigated. The proposed design was the most cost-effective option in this area.
18	Need strategy for eventual upgrade of halfway creek duplication to six lanes.	Proposed strategy for upgrade to six lanes for Halfway Creek is described in Section 4.3.6

30.2 Remaining outstanding issues

There are a number of outstanding issues still to be resolved on the project. The following issues were raised by the RTA during the Risk Management Workshop held on 20 July 2007, and are summarised below. Each of these issues should be addressed during the development of the project to detail design stage.

- There is a level of uncertainty regarding the staging of the project, therefore assumptions made regarding mass haul and timing need to be recalculated when more detail is available.
- The actual geotechnical conditions vary from the preliminary assessment and design assumptions which impacts on the design of cuttings, unexpected soft soils and acid sulfate soils treatments and bridge foundation designs.
- Available material does not meet RTA specification and material is required to be imported.

- Undertaking only part of the project or staging the project impacts on assumptions made about materials, earthwork balances, constructability and cost efficiencies (ie only part of project is constructed and not the whole project).
Constructability uncertainties on the floodplains (ie constructability in high water table and soft soil areas) (only preliminary geotechnical investigations undertaken).
- The project is not delivered within the proposed budget, due to an extended period between concept design and detailed design which causes delays, potential reduction in scope or standards and/or cost impacts on other parts of the overall Pacific Highway Upgrade Program.
- Limited time is allowed to complete the property acquisition processes for the project which delays construction.