

24 JANUARY 2012

Berry Bypass southern suggestion route design update

Meeting held to provide updates on design development of the Berry bypass southern suggestion.

Attendees

Fiona Court

Steve Zhivanovich

Bruce Ramsey

Stuart Coughlan

Gillian Goldsmith

Carla Brookes

Meeting notes

Meeting involved review of design development and cost estimate prepared.

1. Items requiring clarification

- a. Length of the viaduct for the northern preferred option to be confirmed. Current cost estimate includes 565m length, not 650m as discussed previously.
- b. Explanation of current RL design of the southern suggestion requested, in particular the current RL6.5 at CH18600 near the bridge structure at Ch18550.

BR believes that RL of South Coast Railway is approximately RL5.0 using Google Earth and suggests that roadway could be between RL5.0 and RL6.5.
- c. Explanation requested regarding the difference in the deck areas for the structures at Croziers Road (981m²) and Kangaroo Valley Road (656m²) interchanges.
- d. Explanation requested regarding the difference in earthwork rates for reinforced soil walls
- e. Explanation requested regarding the difference in landscaping rates between the cost estimates for northern preferred option and the southern suggestion.
- f. Query as to whether handover and maintenance costs to council included in the contingencies.

- g. Explanation requested regarding the difference in allowance for traffic control for the northern preferred option and the southern suggestion given that more properties to the north will require traffic control.

Explanation provided in meeting that upgrade construction to the existing Princes Highway would be programmed so that the first operation would be to construct the new half of the dual carriageway alongside the old. Traffic would then be taken off the old highway and put onto this new road which would operate as one single lane in each direction. Work would then be done on the old highway without traffic on it. Once the old highway upgrade is complete, traffic would then operate as two dual lane carriageways in each direction.

- h. Explanation requested regarding the rate difference for general earthworks between northern preferred option and southern suggestion. Query as to whether this is due to haulage rates and what assumptions have been used.

Query regarding haulage rate allowed for taking soil out of Toolijooa cut with 11km haul.

- i. Query as to whether cost estimate allows for soil preloading for the southern suggestion. Noted that preloading is included in the southern suggestion construction programme.
- j. Confirmation of required width of viaducts requested. Current design details a width of 26.7m, BR suggests width could be 23m and this would subsequently reduce costs.
- k. Query as to number of property purchases (hardship) to date relating to the northern preferred option.

2. Items requiring further design development

a. Southern suggestion: Railway overbridge

- Noted that the required height clearance over railway is important as it determines length of bridge. Details of design requirements requested, including RailCorp policy.
- Proposed use of a precast arch solution (for example a Bebo arch): requested that this be considered by designers
- Comparison of cost/length with the Gerringong crossing requested

b. Wharf Road Bridge

- Proposed use of a precast arch solution (for example a Bebo arch): requested that this be considered by designers

c. Inclusion of acquisition costs in estimate

- Confirmation requested that acquisition costs are included: current value of properties required for both northern and southern

- Further information regarding assumptions requested
 - d. Contractor's time related running costs
 - Explanation of running costs requested including formula, assumptions
 - Query whether a set percentage was appropriate given difference in scale of project
 - e. Design cost allowance
 - Explanation of design cost allowance requested: assumptions behind set percentage, industry standards, whether a lump sum cost would be appropriate
3. Strategic design development
- a. Southern option: Croziers Road interchange
 - Consideration of adjusting the location of the interchange: moving an interchange either further south to link to Croziers Road or further north.
 - Other considerations in the design: access and bus arrangements; using topographical benefits further north of Croziers Road; impact on Jaspers Brush residents; socio-economic impacts; intersection design issues
 - b. Culverts and minor creek crossings
 - Noted that drainage structures in southern option required to be large enough for tractors
 - BR suggests that three extra drainage structures would be required for the northern preferred option
 - c. Optimisation of RL of southern suggestion design
 - Noted that the RL determines the cut/fill volumes with resulting effects on cost and visual impact.
 - Consideration of impact of requirements for drill and blast, use of scheduling to avoid the need for borrow pits
 - Agreed that designers will focus on optimising the RL for the southern suggestion and cost estimate will be updated to reflect design improvements
 - d. Temporary works
 - Query as to what is included in allowance for temporary works (e.g. access roads to bridge pier locations), in particular whether the viaduct construction rate includes an allowance for temporary works.
 - Noted that clarification is requested to ensure that there has been no double counting of temporary works

Meeting Notes



Transport
Roads & Maritime
Services

e. Earthworks

- Query whether figures are total fill required not imported fill required
- Query regarding impact of reducing the RL on the earthworks cost
- Consideration of incorporation Toolijooa cut and fill equation into design to achieve lowest cost earthworks design

f. Construction programme

- Comparison of predicted construction durations with comparable projects (e.g. Kempsey bypass, Ballina Bypass)

4. Other items

- a. If cost feasibility is noted, more research would be required at a future point on socio-economic impacts for Berry, including from Illawarra Regional Development