Transport Roads & Maritime Services

MEETING NOTES

Name of meeting: Foxground &Berry Bypass Route Comparison Study: Technical Investigation Group Weekly Progress/Coordination Meeting #13 AECOM, 420 George Street, Sydney Location of meeting: Meeting facilitator: Steve Zhivanovich **Date:** 16/05/2012 Time: 10am

Atte	ndees:	

Attendees:	Name	Initials	Organisation
	Henk Buys	HB	AECOM
	Gillian Goldsmith	GG	Evans & Peck
	Phil Jorgensen	PJ	Evans & Peck
	GoranKozarski	GK	RMS
	Annabel Killen	AK	Evans & Peck
	Michael Moore	MM	Evans & Peck
	Rebecca Lay	RL	Evans & Peck
	Ben Noble	BN	AECOM
	John Poposki	JP	RMS
	Dan Reeve	DR	SMEC (External reviewer)
	Ron de Rooy	RdR	RMS
	Glen Smith	GS	AECOM
	Jon Williamson	JW	AECOM
	Steven Zhivanovich	SZ	RMS
Independent	Name	Initials	Organisation
reviewers:	Chris Masters	СМ	SMEC (External reviewer)
	Basil Pazpinis	BP	RMS PMO (Internal reviewer)
	Scott Button	SB	Lyall + Associates (External reviewer)



Additional	Name	Initials	Organisation
distribution:	Derrick Hitchins	DH	SMEC (External reviewer)
	Alan Thomas	AT	RMS PMO (Internal reviewer)
	Adam Berry	AB	RMS
	Ken O'Neill	KO'N	Aurecon
	Peter Stewart	PS	Peter Stewart Consulting

Attachments: Outstanding actions from past minutes

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	Item	Discussion	Independent reviewer input	Action
1.	Review and update of outstanding actions from previous minutes	Outstanding actions reviewed, shown below.		Noted
2.	Comparative Report Deliverables	Overall structure of report The structure of the report needs to be explained in the executive summary of the report. It was agreed that each technical expert should provide a synopsis of their investigations and results of the investigation.	Reviewers noted that the report contained significant technical content and it was important that the structure presented the key outcomes in a useful and accessible style. It was suggested that a synopsis be written for each section of the report to summarise the content to present the key results up front It was also suggested that a summary of the northern route be provided in the report.	All
		Design section Noted that there would be more detail included on the development of the base case routes, including clear explanation that the base case route was selected by	Reviewers noted that more supporting information is required to explain the assessment criteria used to identify selection of the base case route	AK

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	the group based on technical criteria and design parameters.		
	Design section: Visuals		GS
	Updated map required for introduction section with the final northern and southern routes.		
	Updated map required of preliminary route options (blue, magenta and black routes) with improved colour contrast.		
	Flooding investigations – report section Technical notes to be provided to	Independent reviewers discussed their reviews so far of the flooding investigations undertaken.	BN
	independent reviewer to provide the background on the results generated by the flood model runs.	This has included the reviews of information relied upon from other sources such as the previous reports and Shoalhaven Council Flood levels.	
		In addition, the independent reviewer discussed the extent of information that would be expected in the technical notes to allow proper interrogation of the flood	

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		modelling undertaken.	
		Independent reviewer will need to be in a position to confirm that they are satisfied with the work done to date.	
	Geotechnical investigations – report section		НВ
	The geotechnical investigations have been completed and report preparation is underway. A peer review of interpretation of the factual findings will be undertaken by Coffey Geosciences. Coffey's conclusions will be included in the geotechnical section of the report as a check of the TIG's interpretations of the data.		
	The details of the remaining work required on the geotechnical report section were discussed in meeting held 16/05/12.		



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	Construction methods – report section		PS
	Earthworks CMS to be updated to included further explanation of the mass haul analysis.		
	Zoning diagrams to be updated to reflect Toolijooa cut.		
	Construction program – report section		HB
	Progress to date: summary programs have been produced for the report.		
	Final conclusions regarding the necessary treatment for soft soils are required for program finalisation.		
	Cross section of cut diagram		GS
	To better explain the approach for winning additional material from large cuttings such as Toolijooa, long and cross section diagrams should be included in the report.		
	Cost estimation – report section	Reviewers queried the level of detail on	PJ
	Geotechnical issues, in particular the soft	the cost estimate to be provided in the	

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Item	Discussion	Independent reviewer input	Action
	 soil issue, needs to be resolved in order to update the cost estimate. Allowance for soft soil improvement has been identified as a priority issue to be resolved. In particular, input required regarding extent of stone columns required. Discussion of how the cost estimate is to be presented in the body of the report. Current format of the cost estimate is presented using standard RMS breakdown. It has also been noted that the cost estimation process is an iterative process and therefore can only be finalised once all other issues are finalised. 	report. Independent reviewer suggested that not just the high level summary be provided, but it be supported by one further level of detail. BP suggests that the inclusion of background information for the cost estimate section is not necessary as it can be found in the RMS estimating manual. BP also notes that the section regarding estimating structure should be checked for consistency with RMS estimating documents. The Independent Reviewer recommended that enough information be included so that the reader understands the process undertaken to come up with the estimate. <i>Post meeting note: The reviewers discussed the need for a probabilistic risk evaluation exercise and agreed this would not be required at this time as contingencies had been applied to each major cost item based on the known</i>	

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		information	
	 Presentation of provisional items The details regarding the mechanism of including provisional items in the estimate were discussed and unresolved issues were identified for further discussion on 16/05/12 Further explanation of how provisional items have been addressed is required in the report and in a fact sheet for community information. 	Independent reviewers noted that the reasons and approach to including provisional items in a cost estimate needs to be clearly communicated. Post meeting note: The reviewers discussed the inclusion of Provisional Sums and agreed that any item being required as a necessary inclusion to make a route feasible would be listed as an Adjustment Sum. Items not directly impacting the feasibility of a route would remain listed as Provisional Sums.	PJ
	Kangaroo Valley Road Interchange provisional item		GS/RdR
	Additional provisional item to be included in the cost estimate based on a community submission with a split interchange, with ramps at Kangaroo Valley Road and ramps in the vicinity of Schofields lane. A preliminary outline design has been produced for the item.		



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		The design needs to be finalised as a strategic design for inclusion in the cost estimate and in the report to be presented to the minister		
		Drawings to be finalised.		
		It is noted that the mainline and ramps are similar to the current design, however there will be impacts on land acquisition costs and an additional bridge and approximately 1 km of local road are required.		
3.	Geotechnical fieldwork: interpretive report by Coffeys	Awaiting interpretive report by Coffeys. HB to incorporate Coffeys report into the geotechnical investigations report section.		НВ
4.	Critical Issues Register	Northern route: issue of pedestrian connectivity		GS
		RMS to examine possible improvements to pedestrian connectivity. Need to provide cross-section of bridge to show pedestrian connectivity at Kangaroo Valley Road.		



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	Northern route: drainage structures – main viaduct		JP &BN
	Resolution of the clearance at the western abutment is a matter for detailed design. JP to provide a summary of potential solutions. BN to confirm that flooding impacts are acceptable for the current design.		
	Access roads and local road adjustments		RdR/GS
	Need drawings of both sets of access provisions and local road adjustments to be completed so costs can be included in the estimates and residents can examine access provisions.		
	Drawings to be finalised. RdR to provide information on cattle underpasses to GS for finalisation of the access roads and local road adjustments.		
	Casting of beams on site		KO'N
	Further input required to explain		



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	differences between pre-tensioned super T beams and post tensioned segmental box girder bridges including references to comparable projects: Windsor Bridge, Kempsey Bypass Bridge		
	Impact on aquifers in the Toolijooa ridge excavation		НВ
	TIG assessed the impact on aquifers and water table if the Toolijooa cutting is deepened. Results to be included in report. Input required for inclusion in register		
	Earthworks optimisation		RdR
	Preliminary information indicates thatquarry just south of Tindalls Lane is not likely to be an appropriate source of fill. RdR awaiting advice from owner to confirm.		
	Ongoing		



I	Item	Discussion	Independent reviewer input	Action
		Mature tree removal		RdR
		Aerial study attempted however it did not manage to estimate the approximate number of mature trees requiring removal.		
		Assume approximately 120 trees for the northern route; and assume approximately 30 trees for the southern route. This would be subsequently examined in greater detail for whichever route proceeded.		
		Completed		
		RMS design requirements for width of roadway on structures	External reviewers noted that this issue was of concern to the community and needed to be clarified in the TIG Report.	
		Discussion regarding current wording in critical issues register. Agreed that current wording does not clearly state the agreed RMS design criteria.		
		All structures are to provide for maximum of two lanes in each direction and include adequate shoulder width and minimum sight distance requirements.		



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		Issues register to be updated.		
		Issue register updated.		
		Completed		
		Structures visualisations	Independent reviewers note that this issue was of concern to the community, especially the actual heights which were difficult to ascertain from some of the drawings.	
		KO'N stated that community members had expressed concern with the visual impact of the structures. Visualisations of structures to be made available on the project website.		
		Graphics to be made available on the project website in web upload 22 May.		
		Ongoing		
5.	Submission from community member	Acknowledgement of receipt of a submission from a community member containing a new design proposal for the south route with costing information.	Independent reviewer confirmed that the independent review team had received the same submission at the 30 April community meeting.	JP
		The TIG to undertake an assessment of the submission's against the previously agreed design criteria and design standards before an evaluation of the	Independent reviewer advised the first exercise the TIG must undertake is an evaluation of whether the submission conforms to the RMS project design	

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	 differences in quantities and costs. An MX model will be produced in the first instance. Assessment of the submission has been undertaken and the design found not to be compliant. The amount of work required to make the design compliant would be significant. Results of the assessment: the submission does not comply with AustRoads guidelines, and there are no improvements or benefits to the current southern route based on the new submission. The submission aimed to achieve a better earthworks balance, however the geometry of the design was not compliant. Any changes to the geometry will also result in the loss of the earthworks balance. JP has produced a memo which outlines the following: Does not comply with Austroads standards 	 parameters and relevant design standards. Independent reviewers agree that if the design does not comply with Austroadguidelines, the submission should then not be considered any further. The Independent reviewers want TIG to: identify the claimed benefits of the submission, and justify why they are not beneficial. Determine whether any of the submission can be incorporated into the current design. It has been noted that the exercise has been completed. 	

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		- Not possible to comply with alignments		
		- Impact on sewage treatment works		
		The summary of this assessment will be shown in the Critical Issues Register.		
		Ongoing		
6.	AOB	Presentation of report The report was commissioned by RMS to investigate and review the route costs. RMS personnel participated in the investigations along with personnel from Independent consultants. To reflect the input of the various organisations, the report will be issued under a combined banner.	Independent reviewers to decide on the presentation of their independent reviewer report. Reviewers suggested that the title of the report makes clear that the cost estimates have been prepared for comparison purposes.	AK
		Report targets		Noted
		Final report draft to be sent to reviewers Monday 21 May COB.		
		All reports, including independent reviewer reports to be finalised by Monday 28 May COB.		



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	Next TIG meeting		Noted
	With the main focus of the TIG to be on finalising the report it is not intended to have further scheduled TIG meetings. Specific issues regarding any section of the report will be dealt with by the relevant expert and other TIG members as required.		