

BOARD PAPER

Paper no: 16/06/1031

Meeting date: 10 June 2016

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Board function: Significant planning, investment and operational matters

Subject: **SH20A Kirkbride Multi Modal Trench – Funding Approval**



PURPOSE

1. The purpose of this report is to recommend investment for widening the SH20A trench under Kirkbride Road, to future proof for a rapid transit network between Auckland's city centre and the airport, at a cost of \$19.1 million.
2. A companion paper entitled 'Auckland: Rapid Transit to the Airport' (Board paper 16/06/1029 refers) discusses the proposal of providing a rapid transit network to the Airport in the future, which the SH20A/Kirkbride Trench Widening caters for.



SUMMARY

3. The 'State highway 20A to Airport' project is part of the Auckland Accelerated package announced by the Prime Minister in 2013. An interest free loan to support the project was provided to the NZ Transport Agency as part of the Government's 2014 Budget, and the Board approved construction funding in December 2014.
4. At the time of the Board's approval, it was known that widening of the trench at Kirkbride Rd was being evaluated to future-proof options for a rapid transit network. However no preferred option for the widening was available, nor was funding allowance made, at that time. The Board noted, however, that the Transport Agency was working with Auckland Transport to confirm willingness to accommodate this additional cost, which was then estimated at up to \$30 million.

5. There is now an option to include the widening works in the design and construction of the State highway 20A to Airport project, at a cost of \$19.1 million – with a financial assistance rate of 51%.
6. Although this project was not initially identified in Auckland’s Regional Land Transport Programme for 2015-18, it has now been included as a variation. If agreed, it will also need to be added to the National Land Transport Programme as a variation.
7. Although the Transport Agency is able to progress this proposal under delegated authority, we are seeking your support in light of its potential significance.



RECOMMENDATIONS

8. That the New Zealand Transport Agency Board:
 - a. **approves** funding of \$19.1 million for the design and construction of Auckland Transport’s Rapid Transit Network to Airport - SH20A/Kirkbride Trench Widening project and a financial assistance rate of 51% (Transport Agency share \$9.74 million);
 - b. **agrees** to vary the 2015-18 National Land Transport Programme to include the Auckland Transport Rapid Transit Network to Airport - SH20A/Kirkbride Trench Widening project with ‘probable’ funding priority; and
 - c. **notes** that the profile for the project has been assessed as High strategic fit, Medium effectiveness and High benefit and cost appraisal and that the reasons for this decision are set out in the Reasons for recommendation section in Attachment 1.



BACKGROUND

9. State highway 20A is the primary route between Auckland Airport and the Auckland Central Business District.
10. The NZ Transport Agency's 'State highway 20A to Airport' project includes trenching work at the Kirkbride/State highway 20A intersection, currently an at-grade signalised intersection, to convert this into a grade-separated interchange. The trench will cater for the State highway 20A alignment which will pass under the Kirkbride Road alignment.
11. At the request of Auckland Transport, in June 2015 the Transport Agency agreed to allow for trench widening and associated works in the design for construction, to future-proof options for a rapid transit network. Auckland Transport advised that it had included a budget of \$21.4 million in the first three years of its Long Term Plan for this work.



CURRENT STATUS

12. The final cost for the additional widening has now been determined at \$19.1 million. Auckland Transport has submitted a funding request in response to the Transport Agency's decision to accelerate the 'State highway 20A to Airport' project and the need to widen the trench for a grade separated motorway option that won't preclude a future rapid transit network.
13. We have carried out a detailed evaluation and peer review of the application. This has determined that, on the basis that a rapid transit network is highly likely to be needed in the future, it would be prudent to allow for it now in construction at a relatively low cost, rather

than to expend a greater cost to retro-fit it into a completed operating interchange in the future.



PROCUREMENT

14. Procurement of the design and construction of the increased widening has been arranged through the current contractual relationships with the Manukau Harbour Crossing Kirkbride Alliance.



RISKS & FINANCIAL IMPLICATIONS

15. The additional funding to deliver this project was approved by Auckland Council's Finance and Performance Committee on 21 May 2015.
16. A formal contract "Agreement" has been prepared between the Transport Agency and Auckland Transport which documents the final cost and funding share and commitments to procure the design and construction at a fixed cost of \$19.1 million. This Agreement is not inclusive of any financial assistance yet to be approved from the National Land Transport Fund.
17. The Transport Agency portion of the funding as financial assistance at 51% is available within the 2015-2018 National Land Transport Programme.



ASSESSMENT

18. The assessment profile for this project is: High strategic fit, Medium effectiveness and High benefit and cost appraisal. The standard benefit-cost ratio methodology does not apply to this project because key elements of the project are yet to be defined – eg, it could be bus or rail, and timing will depend on as yet unspecified demand triggers being reached. We have therefore assessed the project on the basis of present value cost comparison (construct it now versus retrofitting in the future) and multi-criteria analysis.
19. Our assessment is that investing in this activity at this time will future proof the accommodation of a rapid transit network between Auckland's city centre and the airport.
20. Additional width in the trench is necessary to accommodate any of the future options of kerbside bus, central busway, central light rail transit, or bus rapid transit. The additional width proposed under the current application is sufficient for each of the options presented.
21. Accommodating the increased widening at this stage means the work is incorporated into the construction of the wider 'State highway 20A to Airport' project, thus eliminating significant future disruption and disadvantage to the travelling public.
22. If the works for this project had been delayed until needed in the future, the construction costs will be significantly higher due to the need to retro-fit. Notwithstanding that the final cost has now been estimated at \$19.1 million, an analysis in mid 2015 of the Net Present Values indicated that the cost of including the widening in the current construction would be \$30 million to \$70 million (original Rough Order Cost estimate), while the cost for equivalent work, including the extra needed to retro-fit in the future, would be around \$100 million to \$200 million (Rough Order Cost estimate). Further details of this comparison are provided in the Assessment in the Board Books Resource Centre.



ATTACHMENTS

23. There are three attachments:
- Attachment 1 - Reasons for recommendation
 - Attachment 2 - Location Map
 - Attachment 3 - Pictorial
24. The following supporting documents are available on the Board Books Resource Centre:
- Assessment and options evaluation
 - 'State Highway 20A to Airport' project: Extracts from previous Board papers.

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ATTACHMENT 1: REASONS FOR RECOMMENDATION

The 'Auckland Transport RTN to Airport - SH20A/Kirkbride trench widening construction improvements' project has been assessed against the NZ Transport Agency's Assessment Framework.

The assessment profile for the project is: High strategic fit, Medium effectiveness and a High benefit and cost appraisal. The project's value is as an option to future proof the intersection for a future rapid transit network, be that bus or rail. Multi criteria and cost comparison analyses were employed and the project promoted on the merits of "future proofing" and a Net Present Value that shows it is favourable to include it now as part of the current construction.

The future proofing has been incorporated into the design of the Transport Agency's 'SH20A to Airport' project and into the scope of the preferred option. Agreement was reached with Auckland Transport that it would accept the extra costs of future proofing as a component of its transport programme and apply for funding assistance. The cost estimate for the extra costs has recently been confirmed at \$19.1 million (\$11 million lower than the original estimate).

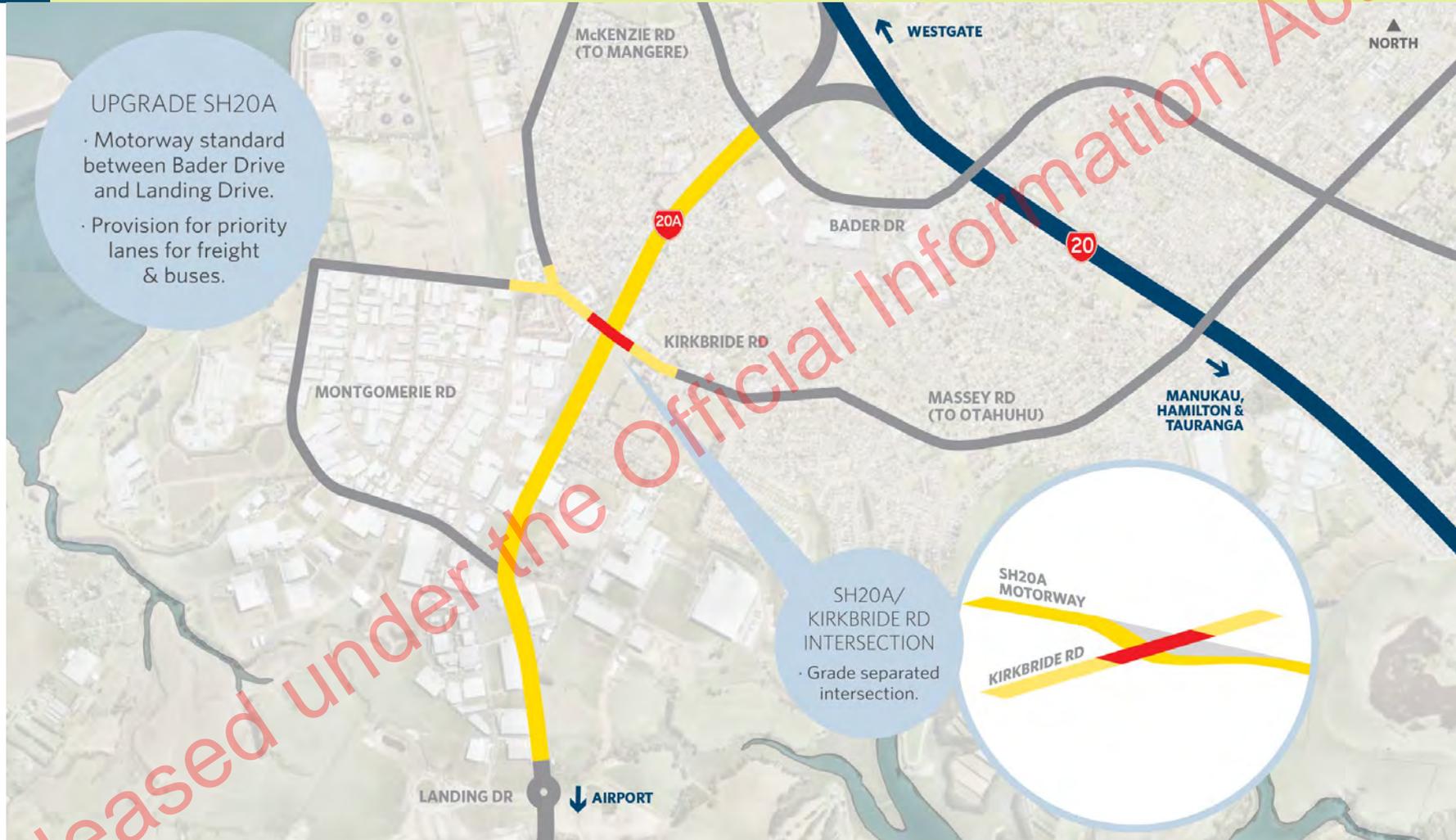
The Sub-regional Strategy that arose from the South Western Airport Multi Modal Corridor Project identified the need for high speed and high capacity public transport service from the airport to the Central Business District.

The Strategy also identified the need for a progression plan for public transport and suggested that in the short term, shoulder-running buses would be the likely solution. Longer term, as capacity of the system constrains effectiveness of the service, there would be a transition to a higher capacity option of busway, light rail or heavy rail.

Additional width in the trench is necessary to accommodate any of the options of kerbside bus, central busway, central light rail transit, or bus rapid transit. The additional width proposed is sufficient for each of the options presented.



ATTACHMENT 2: LOCATION MAP





ATTACHMENT 3: PICTORIAL



To Auckland

Rapid transit

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