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Te Tupu Ngātahi Supporting Growth Alliance – Takanini Level Crossings (Walters Road) Route Protection Detailed Business Case and Next Steps

Aronga / Purpose

1. Provide a recommendation on the preferred option for grade separation of the level crossing at Walters Road, Takanini, based on the findings of independent peer reviews, reconciliation process and feedback from the Papakura Local Board.

Tuku tmana / Delegation

2. Auckland Transport (AT) Board (board) approval will be sought under Delegated Financial Authority 1.3 as the total budget requested exceeds \$20.0m in value.

Ngā tūtohunga / Recommendations

That the board:

- a) Endorses the recommended bridge grade separation option for Walters Road for route protection, as set out in the Te Tupu Ngātahi Supporting Growth Alliance (Te Tupu Ngātahi) Takanini Level Crossings Route Protection Detailed Business Case (DBC).
- b) Notes that no additional funding is sought as this is included in the approved Te Tupu Ngātahi budget of \$7.3 million (inclusive of Waka Kotahi New Zealand Transport Agency (Waka Kotahi) co-funding).
- c) Notes that the Papakura Local Board provided indication of support for the outcome of the independent peer review when available members were informally advised of the findings and that formal feedback will be received at a meeting on 20 September 2023.
- d) Notes that the independent peer review reports have been provided to the Community Group.

Te whakarāpopototanga matua / Executive summary

3. In May 2023, the board approved release of funding for route protection and post-lodgement activities for four of the five level crossings grade separation on the North Island Main Trunk Line (NIMT) as recommended in the Takanini Level Crossings Route Protection DBC (Attachment 1). The recommended option for the fifth crossing, Walters Road, was challenged by a group from the local community comprising Takanini Residents Association, Takanini Business Association and Takanini Village Limited (Community Group).

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4. The board deferred its decision on the option for Walters Road pending a reconciliation process with the experts from AT and the Community Group, an independent peer review of the Multi-Criteria Analysis (MCA) options and re-engagement with the Papakura local board.
5. The reconciliation process has identified areas of agreement and resolved several matters of design disagreement but ultimately has not concluded in agreement on the proposed option. The Community Group continues to seek further reconciliation discussions with AT. The independent peer reviews concluded there was no material reason to change the proposed bridge option and that while both options are technically feasible, the underpass option presented greater risks which would be more expensive to mitigate than the bridge option. The findings of the peer review are to be presented to the Papakura local board on 20 September 2023.
6. Based on the outcome of this process, the bridge remains the recommended option for grade separation at Walters Road.

Ngā tuhinga ō mua / Previous deliberations

Date	Report Title	Key Outcomes
October 2019 Board	Supporting Growth – Amended Programme Alliance Agreement	The board approved Target Cost Estimate Two (TCE2) for the programme, which includes Takanini Level Crossings.
May 2023 Design and Delivery Committee (committee)	Te Tupu Ngātahi Supporting Growth Alliance Takanini Level Crossings Detailed Business Case and next steps	The committee canvassed the wider context and issues relating to the delivery of the level crossing programme included in the current Auckland Transport Alignment Project. Directors discussed the timing of recommending a decision prior to being presented with local concerns at the board meeting on 30 May 2023. Directors agreed to support the recommendations in principle and resolved that a decision would not be made until the local developer’s concerns were presented and considered at the May board meeting.
May 2023 Board	Te Tupu Ngātahi Supporting Growth Alliance Takanini Level Crossings Detailed Business Case and next steps	The board approved four of the five crossing projects and deferred Walters Road to enable: <ol style="list-style-type: none"> a. An independent peer review of the bridge and underpass options. b. A reconciliation to be done between the Takanini Business Association / Takanini Village Limited engineering consultant (Riley Consultants Ltd) and the AT SGA business case. c. Re-engagement with the local board; and d. Thorough and careful consideration to be made on the best crossing option.
September 2023	Te Tupu Ngātahi Supporting Growth Alliance – Takanini Level Crossings	The committee sought assurance that appropriate review processes had been followed as requested and discussed the extent to which the Local Board and Community Group have

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Committee	(Walters Road) Route Protection Detailed Business Case and Next Steps	been engaged in the findings of the peer review and the nature of their concerns and feedback.
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Te horopaki / Background

7. Te Tupu Ngātahi was established to investigate and route protection the optimal strategic transport networks required to support the Auckland Council (Council) future urban growth areas over the 30 year plus time horizon.
8. The purpose of a DBC is to build a complete understanding of acceptable risks, uncertainties and the benefits associated with the investment, so that a final decision can be made on whether to implement it. A MCA is undertaken to allow comparison of options and identify the option which scores best taking into account all of the criteria (the preferred option). The preferred option is then subject to further detailed analysis of the costs, risks and benefits to ensure it delivers the outcomes identified in the business case, is affordable, provides value for money and has a plan for successful delivery. Through this process consultation is also undertaken with partners, stakeholders and the community.
9. The Takanini Level Crossings DBC established the strategic transport network required to support planned growth in Takanini, improve access to employment, and provide safe east-west connections across the rail line. The DBC identified that this could be achieved through grade separation of five level crossings on the rail line, with additional benefits of enabling the capacity of the City Rail Link and other major planned rail upgrades (i.e., four-tracking of the rail line) through allowing increased train frequencies.
10. In developing the Takanini Level Crossing DBC there was an extensive DBC process including several MCAs (see Attachment 2), engagement with external technical experts, subject matter experts (SMEs) from KiwiRail, AT and Waka Kotahi, mana whenua, key stakeholders and elected members (including Papakura local board) as well as three rounds of public engagement (see Attachment 3).
11. Prior to submission to Waka Kotahi Board, DBCs are reviewed by Waka Kotahi's Investment Quality Assurance (IQA) team to ensure it has followed the Waka Kotahi business case process. The Takanini Level Crossing DBC was successfully reviewed by the IQA team in April 2023 and approved by the Waka Kotahi Board in July 2023.
12. At the AT board in May 2023, four of the five crossings were approved with the fifth, a bridge at Walters Road, subject to challenge by the Community Group with alternative underpass option being proposed. The challenge was on the grounds that the underpass would have less visual impact and could be delivered at lower cost than the bridge.
13. The board decision on Walters Road was deferred pending an independent peer review of the bridge and underpass options, a reconciliation process between Te Tupu Ngātahi and the Community Group and re-engagement with the Papakura Local Board.
14. These processes have been carried out and a conclusion reached.

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15. If the board approves proceeding to designate the Walters Road grade separation option, there will be a further opportunity for the community group to present options to an Independent Council appointed Panel hearing the applications for the Notices of Requirement.

Te hononga ki te “Statement of Intent 2023 - 2026”/ Alignment to Statement of Intent 2023 - 2026

16. The process of reconciliation and the independent peer review sought to provide the board independent assurance that the options have been robustly assessed aligns most closely with the Statement of Intent principles that “We will clearly identify an overall benefit that will be recognisable to the impacted user”, and “We will always consider affordability and value for money”

Me mōhio koe / What you need to know

17. Engagement with the community, stakeholders and individual landowners has been occurring since 2020. (See Attachment 3). Specific engagement with the Wallance Family is also outlined in attachment 3. The reconciliation process has been undertaken in parallel with the independent reviews and took place over a nine-week period with three separate expert conferences and several exchanges of correspondence and telephone conversations. It identified areas of agreement and resolved several matters of design disagreement. but did not result in alignment on the option to be route protected.
18. The independent peer reviews concluded there was no material reason to change the proposed bridge option and that while both options are technically feasible, the underpass option presented greater risks which would be more expensive to mitigate than the bridge option. The findings of the peer review are to be presented to the Papakura local board on 20 September 2023.
19. Reconciliation meetings between experts from AT and the Community were productive with agreement being reached on the underpass having less visual impact than a bridge, and that the design standards being used by AT and the community group differed with, importantly, only the AT design providing for the planned future four tracking of the NIMT.
20. Agreement could not be reached on the extent of the visual impacts of the bridge, the impact on crime prevention, geotechnical and cost assumptions. The Community Group considering a bridge would have high adverse visual effects whereas Te Tupu Ngātahi considered these to be moderate in the context of an urban environment already traversed by major transport infrastructure.
21. In discussing how the design of the two options can prevent or mitigate crime, a baseline standard for this assessment was agreed, and the parties have used the national CPTED standard. This standard provides guidance on how to mitigate heightened personal security risk. While the parties did agree that personal security issues could be designed for, agreement was not reached as to the extent to which these issues could be mitigated.
22. Te Tupu Ngātahi geotechnical data supporting the piling assumptions for the underpass, and therefore its cost, were challenged by the Community Group, who considered the assumptions overly conservative and drove unnecessary cost into the underpass design. Te Tupu Ngātahi costing approach is consistent with standard practice for business cases, utilising professional cost estimators guided by industry

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cost databases and professional judgement. The Community Group engaged a contractor for specific rates for their underpass, which deviates from standard practice with higher risk of change by the time of delivery.

23. Subsequent to completing reconciliation, the Community Group has continued to revise its underpass design to align with AT's design standard. The Community Group continues to seek further opportunity for reconciliation.
24. The independent peer review of the DBC was undertaken by ARUP, Gaia, and Alta (see Attachment 4). The scope was to determine if the technical information used in the MCA was appropriate and to identify anything material that could change that overall assessment of the recommended grade separation option of a bridge.
25. Arup considered transport, urban design, Crime Prevention Through Environmental Design (CPTED), engineering, stormwater, hydrology and construction methodology. The review concluded that while the underpass option has greater risks associated with flooding, and CPTED these could largely be mitigated through design.
26. Gaia considered geotechnical aspects. The review concluded that an underpass is expected to have significantly greater adverse effects on the operation of the KiwiRail's tracks and on Walters Road residents, and that any temporary works requirements are expected to be more significant; geotechnical uncertainties and risks are more significant for the underpass than a bridge, particularly the wall piling risks and expected remedial works; and that an underpass is expected to have a larger carbon footprint compared to a bridge.
27. Alta considered the costs. The review estimated that the total P95 estimates inclusive of property, fees, traffic management, etc for the bridge at \$203 million compared to the underpass option at \$261 million.
28. Papakura Local Board has previously given its support for grade separation at Walters Road. Following the board request for an independent review, the local board was consulted as to how it wished to be engaged in the process. The local board was supportive of the independent review and requested that AT present it with the findings, for discussion. This will occur on 20 September 2023 and a verbal update on those discussion will be provided to the board at its 26 September 2023 meeting.

Ngā ritenga-ā-pūtea me ngā rauemi / Financial and resource impacts

29. No additional funding is sought. In May 2023, the board approved release of \$7.3 million from the approved Te Tupu Ngātahi budget for route protection and post-lodgement activities for level crossings in Takanini. This sum is inclusive of route protection at Walters Road.

Ka whaiwhakaaro ki te Tiakanga Taiao / Climate change and sustainability considerations

30. The Takanini Level Crossings DBC determined that the proposed changes to the five level crossings will deliver a daily reduction of 134,900 vehicles kilometres travelled, and an emissions reduction of 7,090 tonnes per year and 182,800 tonnes over 40 years compared to the baseline network. They will also contribute to emission reduction and mode shift by enabling increased passenger rail services and active modes accessibility across the railway line.

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31. The projects will also make positive contributions towards the Transport Emissions Reduction Plan (TERP) outcomes through increasing public transport and active modes accessibility and attractiveness, reduced private vehicle reliance, and facilitating work to begin on decarbonising freight. Details of the exact contribution to TERP will be determined with the final design as part of the Auckland Level Crossings Single Stage Business Case.

Ngā whakaaweawe atu anō / Other impacts

Relationship	Consulted Y/N	Views and Perspectives Received
Māori	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Mana whenua are a partner of Te Tupu Ngātahi and continue to provide input through monthly hui. They acknowledge that something must be done with the existing level crossings in Takanini and have noted the visual amenity of the recommended option is a key concern as are the groundwater and flooding issues associated with an underpass option.
Elected members	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	The Papakura Local Board are regularly engaged and has previously given its support for grade separation at Walters Road. They were consulted on involvement in the peer review process. They supported the independent review process and sought to be presented on the findings at their meeting in September 2023.
Council Controlled Organisations	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Auckland Council supports the desired outcomes of the Manurewa Takanini Papakura Area Plan 2017, which includes Takanini Level Crossing projects. Discussions with Auckland Council have also taken place through regular partnership forums.

Ā muri ake nei / Next steps

32. Should the board endorse the recommended option, Te Tupu Ngātahi will continue preparing the NoR with the intention to lodge in October 2023.

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Ngā whakapiringa / Attachments

Attachment number	Description
1	May 2023 board paper - Te Tupu Ngātahi Supporting Growth Alliance – Takanini Level Crossings Route Protection DBC and Next Steps
2	DBC Multi Criteria Analysis
3	Engagement summary and reconciliation summary
4	Independent peer review

Te rārangi o ngā kupu whakatau / Decision checklist (for Board and Committee members)

Have the following matters and impacts on them been considered in decision making?	Considered Y/N	
Alignment to Statement of Intent 2023 – 2026 principles and statement of performance expectations	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Budget and fiscal constraints	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Climate change and sustainability (including contributing to the Transport Emissions Reduction Pathway)	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Customer and community engagement	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Equity of access to transport	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Māori outcomes	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
Health, safety and wellbeing outcomes	Yes: <input type="checkbox"/>	No: <input type="checkbox"/>

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Te pou whenua tuhinga / Document ownership

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