



Approval for Agenda

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Title: State Highway 20 Waterview update
Report to: Transport Committee
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Democracy services file:

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1.0 Executive summary

The purpose of this report is to:

- update the Committee on the recent New Zealand Transport Agency (NZTA) announcement of a new preferred alignment for the SH20 Waterview project
- outline the next steps for the Council's involvement in the project
- highlight some initial issues raised by the new alignment

At the request of the new government, NZTA has been reviewing the previously proposed SH20 Waterview twin two-lane 'bored tunnel' alignment. This review was sought due to the high project cost and long delivery timeframe, as well as concerns about the ability to future-proof for three lanes in each direction.

NZTA has chosen an alignment that passes at grade (i.e. along the surface) from the planned Maoro St interchange along the rail designation through Hendon Park then drops into a 1.5km long tunnel to pass under New North Rd, the existing rail line and Oakley creek. This tunnel emerges near the intersection of Blockhouse Bay Rd and Great North Rd. After a short section of open motorway, the alignment passes under Great North Rd in the form of a 'cut and cover' tunnel for the length of Waterview Straight, until it emerges to the north at a newly formed interchange at SH16 as originally planned. A plan of the alignment is contained later in the report.

The estimated total project cost is \$1.4 billion, including land purchase, all construction, mitigation and associated works on SH16 to accommodate changes in traffic flows. Four years of construction is expected, with completion in 2015. NZTA estimate that 365 properties will be required for construction of the motorway, 160 of which were already identified as being

affected at the end points of the project, along with an additional 111 'strata titles' to enable a tunnel to be constructed underneath.

The preferred alignment was announced in mid-May, and the Council has not had time to make a full assessment, however the alignment appears to minimise residential and open space impacts (notably Oakley creek) compared to other two potential options. The alignment also includes components previously suggested by the Council, such as the 'cut and cover' section under Great North Rd, which the Council proposed to avoid impacts on the adjacent open space. The project's lower cost removes the potential need for tolling or other private funding, which was a concern raised during earlier consultation.

A comprehensive assessment of the preferred alignment is underway and will be reported to the Committee at its August meeting. The new alignment raises a number of issues, including the potential impacts on the Avondale Heights community and ventilation issues. The Council's SH20 Waterview Political Liaison Group has been re-convened to provide elected representatives more information and allow greater dialogue on the project. Officers will be canvassing local community boards over the coming month to identify issues for investigation and consideration.

The alignment will be reviewed in terms of meeting the Council's strategic aims and plans, as outlined in the previous Council resolution for the SH20 Waterview project. An updated resolution will be presented to the Committee at its August meeting, to form part of the Council's formal submission to NZTA on the project. This revised submission will be based on the same principles as the current resolution – enhanced urban form, linking communities, high quality open spaces, and improved community outcomes – along with seeking funding subsidies for the package of transport projects required to accompany the project.

2.0 Recommendations

- A. That the Committee thanks NZTA for its continuing progress on SH20 Waterview and reaffirms the Council's commitment to work together for the early completion of the project and to achieve the best outcomes for the SH20 Waterview corridor.
- B. That a report is presented to the Committee's August 2009 meeting updating the Council's resolution in support of the revised SH20 Waterview alignment, outlining matters to be addressed through the project.
- C. That the SH20 Waterview Political Liaison Group and relevant community boards be canvassed for issues to be included within the August Transport Committee resolution.
- D. That the updated SH20 Waterview resolution be based on the principles of seeking enhanced urban form, linking communities, high quality open spaces, and improved community outcomes, as per the previous resolution.

3.0 Narrative

3.1 Background

At the request of the new government, the New Zealand Transport Agency (NZTA) has been reviewing the previously proposed SH20 Waterview twin two-lane 'bored tunnel' alignment. This review was sought due to the high project cost, placing it outside the State Highway funding programme. There were also concerns raised about the ability to future-proof for three lanes in each direction and the longer timeline for delivery than originally planned. The review sought a lower cost option

able to be included in funding programme but still achieve overall corridor objectives.

Three options were evaluated by NZTA. The options are described in summary below and a plan is attached in the Appendix A:

Option 1 – Similar to previous ‘bored tunnel’ alignment

This option takes the ‘shortest path’ route and would be mainly at grade or trenched. The option requires a long bridge to cross Oakley Creek and has a high residential property take in Mt Albert/Owairaka. The option also separates the motorway corridor from the rail corridor, creating a new severance issue.

Option 2 – Similar to previous ‘cut and cover’ alignment

This option follows the rail designation and adjacent open space corridors, and is similar to the previous ‘extended cover’ option which was preferred prior to the bored tunnel being developed. This option requires a high residential property take near Pak’n Save and Hendon Ave, and has major impacts on Oakley creek and the open space network. This option allows a cut and cover tunnel beneath Great North Rd along Waterview Straight.

Option 3 – New alignment, includes partial tunnels

This option also allows a cut and cover tunnel beneath Great North Rd along Waterview Straight, but includes an additional tunnel beneath Avondale Heights, from New North Rd to Waterview. Fewer residential properties are impacted but the alignment affects the previously avoided Avondale Heights area. The alignment south of New North Rd is adjacent to rail designation at grade.

3.2 NZTA’s Preferred Alignment Option

Operational issue	<input type="checkbox"/>
Strategic implication	<input checked="" type="checkbox"/>

NZTA has selected Option 3 as the preferred option. Even though this was not the cheapest alignment option, overall NZTA considered it to better address corridor objectives than Options 1 and 2. The option is able to be delivered within the original 2015 timeline and for less than bored tunnel scheme (\$1.4b compared to \$2.77b). Notably, this option utilises the existing rail designation and incorporates partial tunnels to allow the alignment to avoid most open space and residential impacts, compared to the other two options.

As shown in the plan in Appendix B, the alignment for Option 3 passes at grade (i.e. along the surface) from the planned Maioro St interchange behind Stoddard Rd towncentre. It then passes beneath Richardson Rd and crosses Oakley creek on an embankment. The alignment follows the rail designation at grade (on an embankment or in slight trench depending on the ground level) through Hendon Park and Alan Wood Reserve. Provision will be made in the design of this section for the rail line to be constructed in the future, as has been done with the adjoining SH20 Mt Roskill corridor.

The alignment then drops into a 1.5km long tunnel to pass under New North Rd, the existing North Auckland rail line and Oakley creek. This tunnel emerges near the intersection of Blockhouse Bay Rd and Great North Rd, opposite Heron Park. After a short section of open motorway, the alignment passes under Great North Rd in the form of a ‘cut and cover’ tunnel for the length of Waterview Straight, until it emerges to the north at a newly formed interchange at SH16 as originally planned.

The alignment would be constructed with sufficient width to have capacity for six lanes, but would initially operate with only four, in the same way as the SH20 Mt Roskill section. The timeline allows for four years of construction, with completion in 2015.

The estimated total cost (in 2015 dollars) is \$1.4 billion, including land purchase, all construction, mitigation and associated works on SH16 to accommodate the changes in traffic flows. NZTA estimate that 365 properties will be required for construction of the motorway, 160 of which were already identified as being required, as they are located within the area required by the end points of the project. An additional 111 'strata titles' will be required under Avondale Heights properties to enable a tunnel to be constructed underneath.

In late May, the revised Government Policy Statement on Land Transport Funding (GPS) identified an extra billion dollars for the state highway network over the next three years. This additional funding is to support economic growth and productivity through land transport infrastructure and services. The SH20 Waterview project (\$1.4b) is already one of the seven identified as being of national significance, thereby being further assured of funding from within the state highway budget of \$10.7b over the next 10 years.

An initial assessment by Council officers indicates that the option appears to minimise residential and open space impacts (notably Oakley creek) compared to other two options. Obviously all of the revised options have a greater impact than the previous bored tunnel proposal, however it is clear that this expensive project is no longer viable and cannot be considered a possible option.

The new alignment includes components previously suggested by Council, such as the 'cut and cover' section under Great North Rd, which the Council proposed to avoid impacts on the adjacent open space. Previously this proposal was rejected due to the large construction area and therefore land take, however NZTA have identified a new construction methodology which minimises land take and now makes this option viable. Importantly, the alignment's lower cost removes the potential need for tolling or other private funding, which was a significant concern raised during earlier consultation. The lower cost also provides greater certainty that the project will proceed as proposed, as no unbudgeted funding needs to be sought.

The alignment clearly raises a number of issues for investigation, in particular the potential impacts on the Avondale Heights community, as well as access and disruption issues along Waterview Straight. Air quality issues will need to be addressed, as the need for three emission stacks has been identified. These and all other issues will be further investigated and assessed by a range of Council departments and will be reported to the committee's August meeting.

3.3 Next steps for NZTA and Council

Immediately following the preferred option announcement in mid-May, NZTA began directly contacting affected owners. A NZTA brochure has also been delivered to the wider community outlining the alignment and the project's next steps. The brochure includes a response form and NZTA is seeking feedback until the end of July, for inclusion in a report expected to be presented to the NZTA Board in late August. NZTA has been presenting information to the four local community boards and several community open days will be run in June and July, to allow direct engagement with the public.

Council officers have been attending the NZTA presentations at community boards to hear the issues raised by the public and elected representatives, and in June will be canvassing those boards for feedback to include in the upcoming Transport Committee resolution on the project. The SH20 Waterview Political Liaison Group has been re-convened to discuss project issues and enable informal dialogue with NZTA. Issues raised by the public will be brought forward to this forum by local elected representatives and the public will also be encouraged to raise issues directly with NZTA through their consultation processes.

In parallel, a cross-Council project team is assessing the alignment to allow more detailed responses to be included within the upcoming Transport Committee resolution. The alignment will be reviewed in terms of meeting the Council's strategic aims and plans, as outlined in the previous Council resolution for the SH20 Waterview project.

An updated resolution will be presented to the Committee at its August meeting, to form part of the Council's formal submission to NZTA on the project. NZTA has agreed to accept this late submission despite their consultation period closing at the end of July. This revised submission is likely to retain the same principles as the current resolution – enhanced urban form, linking communities, high quality open spaces, and improved community outcomes – along with seeking increased funding subsidies for the package of transport projects required to accompany the project.

Additionally, Council officers will be working with NZTA specialists on project design issues through an Urban Design Framework process and discussions on issues such as open space replacement, pedestrian/cycle connections and future land use opportunities. As each of these topics is developed, individual projects will be reported to the relevant committee for consideration.

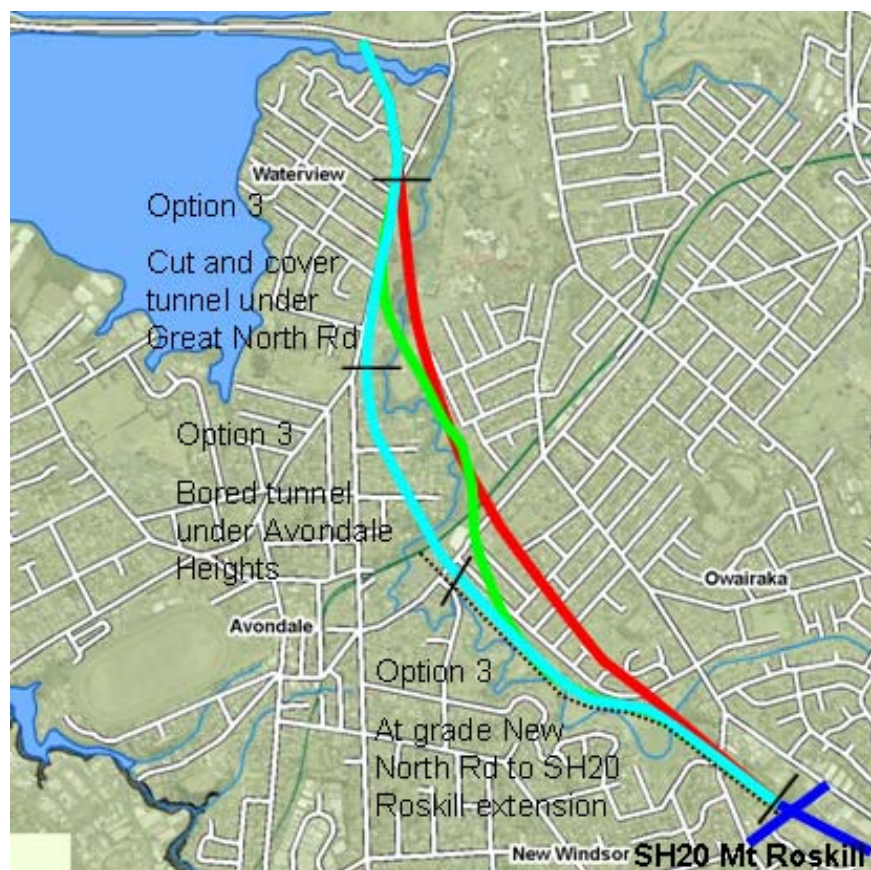
Council officers are also developing potential mitigation measures for discussion with NZTA, in line with the themes of the updated resolution – enhanced urban form, linking communities, high quality open spaces, and improved community outcomes. These are being explored through the urban design process and will feed into the statutory processes as the concepts are developed further. An initial list of potential mitigation measures is attached in Appendix C.

3.4 Budget Implications

Funding for liaison with NZTA and the investigation of project issues is provided within existing Transport Strategy opex budgets for the 2008/09 and 2009/10 years.

	Name and title of signatories	Signature
Author	Daniel Newcombe, Senior Transport Planner	
Reviewer	Matthew Rednall, Manager Roding	
Reviewer	Brian Tomlinson, Acting Group Manager Transport Strategy	
Approver	Don Munro, General Manager Transport	

Appendix A: NZTA 2009 reassessed SH20 Waterview options



Option 1
Similar to 'bored tunnel' alignment at grade

Option 2
Similar to previous 'cut and cover' alignment at grade

Option 3
New alignment at grade and tunnel

..... Rail designation

Appendix B: NZTA's preferred alignment for SH20 Waterview



Appendix C: Potential mitigation measures

1) Urban Form

- That appropriately enhanced urban form and land uses are provided along the corridor including the surface corridor and around the tunnel portals
- Continuous built edges are provided along both sides of Richardson Road, Hendon Avenue, New North Road and Great North Road

2) Linking Communities

Ensure that the design of the motorway / rail corridor provides and facilitates local access improvements including:

- Connections across the surface corridor linking Mt Albert and New Windsor
- Provision of local connections to the motorway
- Delivering Passenger Transport infrastructure along Great North Road
- Delivering walking and cycling infrastructure along and across the corridor

3) Open Space

Ensure open space is replaced or reconfigured with equivalent or greater quality and value of open space within the local network.

- The interface between open space and adjoining land uses is supportive of quality open space outcomes
- Provide an integrated approach to flood control issues associated with Oakley Creek without compromising the values of the creek and open space network

4) Social and Community

Ensure improved social, economic, community and environmental outcomes for impacted communities by providing replacement and enhanced community facilities in the local area.

- That tunnel air emissions are cleaned and filtered prior to being discharged and will not be located adjacent to sensitive areas.
- In conjunction with the Ministry of Education and the Auckland Kindergarten Association, ensure that temporary or long term project impacts do not threaten the on-going operation of local schools kindergartens and community facilities
- Use of surplus NZTA land for transport, business or community use
- Continued protection of identified heritage sites