

Please Quote Ref: LG/9/WRC
DR:GH1881

16 November 2000

Wellington Regional Council
P O Box 11646
WELLINGTON

Attention: Tony Brennand

Dear Sir

REPORT FOR REGIONAL LAND TRANSPORT COMMITTEE

Set out below is a report to the Regional Land Transport Committee (RLTC) on a number of projects being undertaken in the region by the Wellington office of Transit New Zealand (Transit).

Attached are copies of recent newsletters and publications, namely:

1. SH1 : Waikanae to Himatangi Strategy
2. SH1 – Beach Road Intersection, Paekakariki.
3. Media Release: SH1 Pukerua Bay to MacKays crossing
4. SH1 – Plimmerton to Pukerua Bay.
5. SH2 – Dowse to Petone Upgrade
6. October issue of "Top n Tails"
7. Letter to WRC sent to all Territorial Authorities

At the previous meeting the RLTC discussed reports from the road controlling authorities and the Regional Council (in terms of passenger transport) as a form of implementation report of the Regional Land Transport Strategy (RLTS). Accordingly, I have structured the report below in a similar manner to the RLTS.

WESTERN CORRIDOR

RLTS Corridor Plan:

Roading Projects to 2004

- *Construct a new two-lane bridge at Paremata (\$4.3m)*
- *Complete the safety improvements on State Highway 1 north of Paremutn (\$8.7m).*

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- *Complete the safety improvements at McKays Crossing (\$12.3m).*
- *Implement the Active Traffic Management System at Ngauranga Gorge and three lanes in each direction south to the State Highways 1 and 2 merge (\$5m).*
- *Construct the river crossing stage of the Kapiti Local Connecting Road (\$3.7m).*
- *Provide other safety and capacity improvements on Stage Highway 1 between Paremata and McKays Crossing appropriate to the timing of the Transmission Gully (new project).*
- *Develop proposals for the future of the existing State Highway with appropriate agencies for once Transmission Gully is built.*
- *Resolve funding, legislative and resource management issues relating to Transmission Gully, purchase required land and commence construction if possible.*

Roading Projects Beyond 2004

- *Construct Transmission gully as a toll road as soon as possible (\$233m).*
- *Construct the remainder of the Kapiti Local Connecting Road (\$24m).*

SH1: Himatangi to Waikanae Strategy Study

In October 2000, the Transit Authority considered a strategy for State Highway 1 between Waikanae and Himatangi comprising:

- (1) A four lane highway in or near the existing corridor between Waikanae (Peka Peka Road) and Levin;
- (2) A two lane eastern bypass of Levin;
- (3) Retaining the existing two lane highway north of Levin with improvements comprising seal widening, additional passing lanes and a short realignment south of Foxton.

This draft strategy will be used as the basis of consultation with the Kapiti Coast and Horowhenua District Councils, community boards and other interested parties will be considered next year by Transit to confirm the strategy (amended as necessary) as appropriate.

Regarding the section of SH1 within the Wellington region, the draft strategy proposes four laning primarily on the existing alignment from Waikanae to just south of Otaki, and then an eastern bypass around Otaki. Initial project economics indicate that it is appropriate to now make further progress on the planning for the four laning of the existing section south of Otaki and investigate further the eastern bypass of Otaki, noting that it is likely to be some years before construction of the Otaki Bypass

is justified. Further details are included in the attached Transit Authority Submission.

SH1: Waikanae to Poplar Avenue Strategy Study

This strategy study considers the long term development of this section of SH1. It accepts that the Western Link Road (WLR) being jointly taken between Transit and the Kapiti Coast District Council (KCDC) is expected to be progressively constructed, with initial construction programmed to commence in 2004. The results of this strategy study are expected to be reported early in the new year.

SH1: Hadfields Road to Peka Peka Road

Transit has recently obtained the necessary planning consents and land required for this \$1.1M project. The project will be constructed as soon as funding is available. The project provides for straightening of the road as the first stage of improvements to SH1 through this section, with the second stage to be undertaken when the highway is eventually four laned.

SH1: Vicinity of Otaihanga Road

The high accident rate on this section of SH1 has resulted in Transit initiating detailed investigation for improvement of this section of SH 1. While a number of small scale improvements have been undertaken at the intersection over the last five years, a significant accident history is still apparent at the intersection, due both to turning vehicles and loss of control accidents for state highway traffic.

SH1: Lindale to Nikau Palms Drive, North of Paraparaumu

The proposed \$2M project provides for construction of an underpass for the two connecting side roads, with full turning movements provided for by on /off ramps. The high quality access will also provide for all turning movements in and out of the Lindale tourist complex, with the existing entrance on to SH1 being closed once construction is complete.

The project has recently received the necessary planning consents, and design is almost complete. The design is consistent with future four laning. Funding for construction will be sought to allow a start in early 2001.

SH1: Poplar Avenue to MacKays Crossing (Raumati Straight)

The contract for this \$2.3M project was awarded in October, and construction has commenced to widen the carriageway and provide a median barrier to separate opposing traffic. It is anticipated that this project will take eighteen months to construct, including a winter close-down period in 2001 to allow for settlement of the additional formation width on the western side of the existing highway.

SH1: MacKays Crossing

Applications for the designation and necessary resource consents will be made shortly for this project. The project will provide four lanes across the North Island Main Trunk Rail line, and its two stage construction will provide the northern termination of the Transmission Gully Motorway (TGM).

The first stage provides for the rail crossing with the new alignment crossing the rails some 200 metres north of the existing crossing, and the route rejoining SH1 on the first straight south of the existing crossing.

The second stage will be constructed when TGM is constructed, and provides for new alignment passing west of the existing highway through the Sang Sue property and then looping back across existing SH1 and south toward the Wainui Saddle.

SH1: MacKays Crossing to Pukerua Bay

In my last report to the RLTC, I noted that Transit had reacted to an emerging accident pattern on this section of road by reducing the speed limit of Beach Road to 80 km/hr to increase awareness by motorists of the intersection. Since that time, Transit has investigated a number of measures which are aimed at making this highway particularly conspicuous for motorists in a way such that they will improve their behaviour on this section of SH1. Attached is a press release which details the responses proposed, most of which will be installed prior to Christmas.

SH1: Pukerua Bay Bypass

This project is still "on hold" pending confirmation of the timing of construction of TGM. Transit has however bought two properties over the last two years as a result of widespread knowledge of the project within the community making properties on the preferred alignment unmarketable.

SH1: Pukerua Bay to Plimmerton

This \$9.3M project is proceeding on programme for completion in August 2001. Approximately two thirds of the earthworks have been completed and it is anticipated that pavement construction will commence over the next month. Porirua City Council (PCC) are expected to confirm shortly funding of the off-road cycleway between the highway and the Taupo Swamp which will be constructed as part of the contract works.

SH1: Plimmerton to Paremata

The Environment Court hearing commenced on 28 August and involved 11 days in court. Subsequently Transit, PCC and WRC have agreed most of the conditions which should be attached to the designation for the project with the appellants, in the event the Court approves the Notice of Requirement. The appellants, notwithstanding agreement on most of these conditions, maintain their view that the project should not proceed.

It is uncertain when a result from the Environment Court will be available, however assuming a positive outcome in the early part of 2001, then completion of construction of the \$18.4M project is expected to be in the 2002/2003 year.

SH1: Whitford Brown Intersection

Additional options to consider grade separation are being considered in consultation with PCC. The project economics recognise the uncertainty of timing of TGM and the result of the investigations are now expected to be reported early next year.

Transmission Gully Motorway (TGM)

Transit is progressing a number of appeals to the designation arising from the hearing in front of independent commissioners in 1997. A further mediation hearing was held with the Tawa Community Board (TCB) of the Wellington City Council on 14 November. Further work and discussions with Transit and TCB will occur early in the new year. Transit is hopeful of a suitable settlement.

Other appeals are being progressed, however the appeal by the Paremata Residents' Association related to the eight year time frame for advance ecological mitigation is the most substantial.

In recognition of the desire for early construction of the Transmission Gully Motorway, the Transit Authority resolved in October to proceed with all activities required to enable early construction of the route. Specifically this includes the following:

- (1) Proactive property acquisition (or securing of necessary leases) for critical properties or those required for early ecological or landscape mitigation works. (Transit currently owns twelve of the 62 required properties).
- (2) Further investigation and preliminary design work necessary to support WRC consent applications.
- (3) Development of a detailed procurement strategy. This activity is particularly necessary as it has an interaction with the strategy required to obtain the remaining consents for the route.

Transit is working with the Department of Conservation and WRC staff in order to develop a sound strategy for obtaining the necessary consents.

A letter was forwarded to each of the territorial local authorities (copy attached) which details the future activities.

Transit's view is that the earliest possible completion date of TGM is the end of 2006, assuming that mitigation works are only required for three years. Transit has identified that the major risks to the completion date, and their effect are as follows:

- (1) Compulsory land acquisition. If this is required then it is likely that completion of the route will not be possible until 2007.
- (2) If substantial appeals are lodged against the WRC consents, then completion of the route could be held up until the end of 2008.

These completion dates require that funding for early construction, including any supporting legislation, for early construction must be in place by mid 2002.

Key risks for the early delivery of TGM are as follows:

- (1) Inability to secure funding/legislation for TGM.
- (2) Inability to secure funding for fees for essential preparatory work, particularly related to WRC consents, procurement strategy development and land purchase as described above.
- (3) Inability to secure resource consents in a suitable form to allow economic construction of the route.
- (4) Potential technical difficulties in the design.
- (5) Increased cost estimates after detailed investigation and design work has been completed.

SH1: Ngauranga Gorge Active Traffic Management System (ATMS)

The system is currently being tested, and members' who travel through this section will have observed this in progress. It is anticipated that the system will be fully commissioned within the next month. For the first few months, the highway will be maintained at 80 km/hr until motorists become familiar with the operation of the variable messages, at which time the variable speed limit will then be operated to improve traffic flows, particularly during times of peak demand, or accidents. Once motorists have become familiar with the system, then at a 100 km/hr speed limit during low flow conditions and good weather will occur.

NGAURANGA TO WELLINGTON CBD

RLTS Corridor Plan

Roading Projects to 2004

- *Construct the Ngauranga-Aotea tidal flow system (\$16m)*
- *Construct the next phase of the inner city bypass through Buckle and Arthur Streets (\$26m); and*
- *Enhance traffic management to improve pedestrian and vehicle flows (\$2m).*

Ngauranga to Aotea Capacity Improvement

The Terms of Reference for the detailed scheme assessment is currently with the Wellington City Council (WCC). The Terms of Reference recognise that the WCC street network has only limited ability to accept traffic at an increased rate during the morning peak. Development of the detailed proposal for capacity improvement, including provision of a moveable lane barrier will be developed in the early part of 2001.

SH1: Wellington Inner City Bypass – Stage 2 (WICB2)

Transit is awaiting a response from Transfund on the funding application for the detailed design of this project. The project has been independently peer reviewed and shows a B/C of 3.8 based on tangible benefits, and 4.2 including other non road user benefits. Transit holds all the necessary land and consents for the project.

Transfund have engaged an independent reviewer to further consider the project. Subject to funding being confirmed by Transfund, it is expected that the first work on site will occur in the first half of next year.

WELLINGTON SOUTH TO AIRPORT

RLTS Corridor Plan

This corridor covers that area of Wellington City south and east of the Basin Reserve through to the Wellington Airport.

Roading Projects to 2004

- *Undertake further investigation of this transport corridor with relevant roading and transport authorities*

Projects beyond 2004

- *Investigate alternative solutions, and if cost effective construct Mt Victoria Tunnel duplication in conjunction with a road toll on the tunnels (\$50m).*

SH1: Basin Reserve

See attached "Top n Tails". The consultative working group has met twice, and it is expected that a short list of options will be presented to WCC in February and used as a basis to further develop the long term strategy for this key traffic junction.

WAIRARAPA CORRIDOR: MASTERTON TO UPPER HUTT

RLTS Corridor Plan

Roading Projects to 2004

- *Construct improvements on the Kaitoke Hill Road (\$10m),*
- *Maintain continuous improvements on the Rimutaka Hill Road,*
- *Complete the 70 kph standard design for the Rimutaka Hill Road,*
- *Develop passing lanes on the Featherston-Masterton Road.*

Projects beyond 2004

- *Develop the Rimutaka Hill road to 70 kph standards (\$30m),*
- *Develop additional passing lanes on the Featherston-Masterton Road.*

SH2: Mt Bruce to Featherston Strategy Study

The strategy study is currently being finalised and will be reported to the Transit Authority shortly. Key outcomes are the ongoing development of passing lanes between the four Wairarapa townships, and specific improvements such as Waiohine Bridge (see below) and sections of highway where land use causes significant interaction with passing traffic (eg the fruit stalls north of Greytown). These identified deficiencies will be the subject of more detailed investigation work over the next year.

SH2: Waiohine Bridge

This relatively narrow highway bridge over the Waiohine River north of Greytown has caused significant adverse comment from road users over the years however the accident history for the bridge itself is relatively minor, notwithstanding a number of anecdotal reports to the contrary. The bridge provides a constriction in the Waiohine River, and contributes to the higher flood levels in the river and surrounding floodplain north of Greytown.

Transit has been working closely with the South Wairarapa District Council (SWDC) and WRC on a scheme to replace the bridge with a wider structure, and carry the water level area to meet the desires of both agencies, and the local community. Transit has recently received the detailed investigation report, and will be reviewing this over the next several weeks. An outcome from this report is expected early in the new year.

SH2: Rimutaka Hill

Transit is currently seeking tenders for development of the detailed strategy for SH2 over the Rimutaka Hill. This recognises the development to 70 km/hr standards in the RLTS and will move forward strategy work undertaken over the last seven years.

In terms of physical work, the present focus is on elimination of the tight bends some 500 metres south of the summit. This is the only corner now left where heavy vehicles regularly track across the centre line due to the narrow carriageway and tight

alignment. Additional geotechnical investigations have been undertaken to confirm key design assumptions and these are currently being interpreted and final costings and project economics being established. Assuming they confirm the initial assumptions, then further physical work at this side is likely in the next eighteen months.

SH2: Kaitoke Realignment

This \$10M project was the subject of a planning hearing at Upper Hutt City Council (UHCC) late last year. Subsequently, of the two landowners who appealed to the Environment Court one has been formally resolved, and we have been advised that the consent order resolving the final appeal will be lodged with the Environment Court next week. Transit is actively purchasing property on the route, and has completed four of the sixteen purchases necessary, with others well advanced. Detailed design work is on target, and assuming remaining property can be purchased without undue delays, then it is expected that the project will be advertised for construction in early to mid 2001.

HUTT CORRIDOR: UPPER HUTT TO NGAURANGA MERGE

RLTS Corridor Plan

Roading Projects to 2004

- *Design and construct an upgrade of the Korokoro/Dowse intersections on State Highway 2 (\$37m);*
- *Design and construct SH2/58 intersection improvements involving grade separation and removal of traffic signals, and*

Transit has recently sought tenders for a professional services contract for the detailed investigation for this section of road from Te Marua to Akatarawa Road. This section includes the "Colliers Dip" section of SH2 which is flooded from time to time and has been the scene of several fatal accidents. Currently through this section there are a number of paper roads which potentially could significantly affect the safety of the highway in the future as adjoining development continues. The objective of the scheme is to provide a development plan to mitigate the ongoing affects of these developments and provide a secure highway corridor long term.

SH2: Dowse Drive, Korokoro to Petone

Public consultation for the redevelopment of this section of SH2 is now virtually complete. Transit anticipates lodging the planning consent applications with WRC and Hutt City Council (HCC) in early March 2001. More detailed commentary is included in the attached project newsletter.

SH2: Petone to Ngauranga

WCC and Transit have been working together to improve cycle facilities on this busy section of SH2. It is anticipated that the first stage of the upgraded cycleway north of the Ngauranga interchange will be opened jointly by WCC and Transit next week. This has provided improvements to the surfacing of the cycle/footway for the first 1-2 kilometres north of the interchange.

PORIRUA TO HUTT VALLEY

RLTS Corridor Plan

Roading Projects to 2004

- *Provide safety improvements to State Highway 58 and its junction with SH1 (\$16m); and*
- *Construct a replacement Pauatahanui bridge (\$2.5m)*
- *Address the needs for high quality roading links between Porirua and the Hutt Valley*

Projects Beyond 2004

- *Construct the Hutt Valley-Porirua Road link in conjunction with the Western Corridor Implementation Plan (\$62m). (Under review in Eastern Corridor Implementation Plan).*

SH58: SH2 Intersection to Harris Road

The Notice of Requirement and related consent applications for this \$24M project will be publicly notified in the week commencing 20 November. The project involves reconstruction of SH2/SH58 intersection to provide for a full interchange similar in layout to the Mungavin interchange in Porirua. The project addresses particularly the very poor accident record on the section of SH58 from the Dry Creek Quarry to Harris Road. 75% of the project benefits relate to safety improvements.

It is anticipated that hearings will occur in March/April 2001.

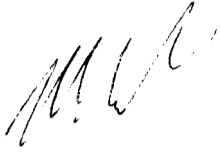
SH58: Pauatahanui Bridge

The contract for physical works for this project was awarded in September and physical works has commenced. The project provides for the construction of a roundabout some 200 metres east of the existing single lane bridge, construction of a new two lane bridge across the Pauatahanui Stream, and related works. The project also includes the realignment of the S bend (known locally as Hendersons Bend) which is immediately west of the Joseph Banks Drive intersection. It is expected that this \$2.5M project will be substantially complete in June, with some final restoration work undertaken during the spring.

CLOSURE

I have not detailed all activities that Transit is involved in, and will be happy to expand on these, or in more detail on the above as required at the meeting.

Yours faithfully

A handwritten signature in black ink, appearing to read 'M. Rendall', written in a cursive style.

Dave Rendall
REGIONAL MANAGER

Agenda item N° **7**

Submission N° CS/00/10/3770 Page 1 of 8

PR6-4003

Submission to the Transit New Zealand Authority:

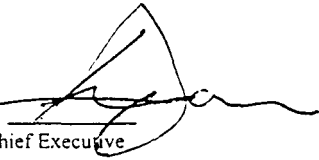
OPEN

Subject: State Highway 1: Waikanae to Himatangi Strategy

Submitted by:


P National Highway Manager

Endorsed by:


A. Chief Executive

Purpose

1. To seek approval for a broad strategy for four laning State Highway (SH) 1 between Waikanae and Levin, a bypass of Levin and upgrading the existing highway north of Levin.

Attachment

2. Attachment A: Strategy Map

Background

3. SH 1 north of Waikanae is currently a two-lane highway passing through Otaki and Levin, and other smaller rural settlements. South of Levin, SH 57 branches off SH 1 to Palmerston North and the Hawke's Bay.
4. Between Waikanae and Levin, traffic volumes are consistently within the range of 13-14,000 vehicles per day (vpd). Through Levin, traffic volumes increase to 16-18,000 vpd and then north of Levin, the volumes drop off to 8-9,000 vpd. These traffic volumes are increasing at about 3 per cent per annum.
5. To date, the strategy has been to progressively upgrade the existing highway by means of realignments, additional passing lanes and intersection improvements. A further \$17M of improvement projects have been identified in previous studies and these have been based on upgrading the existing highway.

6. The practical capacity of a two lane rural highway in flat terrain is in the range of 16-18,000 vpd and traffic volumes between Waikanae and Levin are expected to reach this capacity within the next 5 to 10 years. In Australia and North America, the thresholds for four laning are in the range of 8- 12,000 vpd.
7. Through Otaki and Levin, traffic volumes are expected to increase to over 20,000 vpd within 10 years which will require the existing highway to be widened or bypassed within this timeframe
8. It is now appropriate to plan for four laning, the existing highway (or a new two or four lane highway) between Waikanae and Levin, and bypasses of Otaki and Levin (or for widening the existing highway). North of Levin, a two lane highway will be adequate for the next 20 years and accordingly it is appropriate to retain a two lane highway with improvements as required.

Strategy Study

9. A study has been underway since 1998 to develop a broad strategy. In particular, the study has been to investigate the following options:
 - (a) Waikanae to Levin
 - (i) a four lane expressway on or close to the existing highway alignment, or
 - (ii) a new two or four lane highway on a new coastal route.
 - (b) Levin Bypass
 - (i) a bypass west of Levin, or
 - (ii) a bypass east of Levin, or
 - (iii) widening the existing highway through Levin.
 - (c) North of Levin
 - (i) improvements to the existing two lane highway.

Waikanae to Levin

10. The forecast traffic volume on the corridor in 2010 is 17,000 vpd, and of this volume, 9,500 would be attracted to a new coastal route. This would only warrant a two-lane highway, at least initially, and a four-lane highway on a new coastal route would only be justified in 30 – 50 years when the traffic volume increased to at least 15,000 vpd.
11. Accordingly, the options are either for a pair of two-lane highways comprising a new coastal highway and the existing highway, or a four-lane highway on or close to the existing alignment. The comparative costs and benefits of these options from north of Waikanae to Waitarere (including

Otaki and Levin bypasses in the case of the four-lane option but without service roads or grade-separated intersections) are:

Options	costs (\$M)	BCR
Two-lane Coastal Highway	81.1	2.0
Four-lane Highway in the Existing Corridor	173.4	2.0

12. The incremental BCR of a new four lane highway in the existing corridor compared to a new two lane coastal route is 1.9 which means a new four-lane highway is only marginally economic. However, there are other significant advantages with four laning in the existing corridor, as follows:
 - (a) a single four-lane highway would offer a much better level of service than two two-lane highways, even with passing lanes on a new two-lane highway, both for through traffic on the new highway and for local traffic on the existing highway;
 - (b) the development of a four-lane highway in the existing corridor could be staged by progressively widening or realigning sections, grade separating intersections and providing local parallel service roads for property access, whereas a new coastal route would need to be constructed in its entirety as a single project in order to be serviceable; and
 - (c) a new four-lane highway in the existing corridor would provide better access to Otaki and Levin, compared to a new coastal route.
13. In conclusion, the proposed strategy between Waikanae and Levin is to construct a new four-lane highway (or to upgrade the existing highway to four lanes where appropriate) on or close to the existing alignment.
14. Some preliminary consideration has been given to whether the existing highway can be upgraded to four lanes or whether it is necessary to deviate onto a new alignment. The main factor is whether in the long term, safe access can be provided to frontage properties if the existing alignment is retained, particularly between Otaki and Levin where frontage development is quite extensive.
15. At this stage, it is considered that it may be practical to widen the existing highway to four lanes south of Otaki but north of Otaki it is likely that a new alignment will have to be adopted. This alignment is dependent on the (bypass) route through Levin.

16. A preliminary assessment of the costs and BCRs of the various sections, which will now form the basis of more detailed scheme assessments, are as follows:

Section	Length (km)	costs (\$M)	BCR
Peka Peka to Te Horo (south)	5.2	14	3.1
Te Horo (south) to Otaki River	4.7	21	1.8
Otaki Bypass	2.8	37	0.6
Waitohu to Pukehou	4.4	10	3.6
Manakau Bypass	4.7	24	1.6

17. Of the total length of 21.7 km between Peka Peka and Manakau, it would seem that schemes covering 8.6 km (or nearly 45 per cent of the length) might already meet current funding criteria. Accordingly, it is proposed to give priority to finalising the schemes for these sections. However schemes also need to be developed for the other sections as soon as possible so that the local communities are aware of Transit's plans.

Standards

18. The standard of the new four-lane route will comprise two lanes in each direction separated by a grassed median. It is envisaged that, initially access to the highway will be limited to left turns only, except at defined intersections approximately 5km apart. Over time, it is expected that parallel service roads will need to be constructed to remove all intermediate accesses and key intersections will be grade separated.

Levin Bypass

19. The forecast traffic volume through Levin in 2010 is 21,000 vpd, which, without a bypass, would require the highway to be four lanes.
20. From Kimberley Road south of Levin to Waitarere Beach Road north of Levin, the costs and BCRs of four laning the existing highway compared to an eastern bypass of Levin are as follows:

Option	cost (\$M)	BCR
Upgrading existing highway to four lanes	5 -45	2 - >10
Levin Bypass (on the east side)	34.5	3.2

15

- 21 The cost of upgrading 'through' Levin is dependent on accepted standards. For example, four lanes could be achieved by removing parking, taking out the existing trees, banning turns at intersections and painting a double yellow line down the road centre-line. Alternatively the construction of a central median with right turn bays and additional lanes at intersections for turning traffic and retaining angle parking would be more responsive to the "main street environment", requiring the acquisition of commercial properties.
22. On the basis that improvements would be required to preserve the "main street" environment through Levin, the economics of upgrading the existing highway and a bypass of Levin are comparable. However, the level of service through Levin would still be poor with the traffic flow being interrupted by two sets of signals. More importantly, however, four laning the existing highway street of Levin would be very disruptive to the main street, seriously aggravating the existing severance and problems through the retail and commercial area and destroying the existing streetscape including the historic plane trees. The Horowhenua District Council (HDC) is opposed to any such disruption of the main street and instead supports a bypass of Levin.
23. Three basic options for a bypass have been considered, two bypass options to the west of Levin, one on each side of Lake Horowhenua, and one bypass option on the east side of Levin. Compared to the option of a bypass between Levin and Lake Horowhenua, a bypass west of Lake Horowhenua would be more expensive, have less benefits and would have serious cultural effects on local iwi sites. The entire area is considered to be waahi tapu. This route is also not supported by HDC due to its remoteness from Levin.
24. The costs and BCRs of bypass options between Lake Horowhenua and Levin, and east of Levin, are as follows:

Option	Cost (\$M)	BCR
Bypass between Lake Horowhenua and Levin	43.2	1.8
Bypass east of Levin	34.8	3.2

25. A bypass east of Levin has a number of other significant advantages, as follows:
- (a) it provides a connection to SH 57, as well as SH 1 to the north, and therefore is a better strategic option;
 - (b) it utilises part of the existing SH 57 alignment, whereas a bypass west of Levin would cause significant property severances; and

- (c) a bypass between Lake Horowhenua and Levin would seriously impact on recreational facilities at and around Lake Horowhenua where there are a number of parks.
- 26. Accordingly, a bypass east of Levin is preferred. With forecast traffic volumes in 2010 of 9,000 vpd, it is envisaged that, initially, this will only need to be two lanes. The preliminary BCR of this strategy is 3.2 based on a preliminary cost assessment of \$34.8M.
- 27. It is possible that the southern leg connecting the proposed Manakau bypass and the existing section of SH 57 on Arapaepae Road serving SH 57 traffic only could be justified in advance of the northern leg traffic but this is an issue to be determined in the full scheme assessment.
- 28. Again, it is proposed to proceed now to a full scheme assessment to confirm the route and obtain a designation. It is proposed that the designation should be wide enough for ultimate four laning with grade separated interchanges and full access control.

North of Levin

- 29. As previously stated, a basic two-lane highway north of Levin will be sufficient for the foreseeable future. Some improvements to the safety and efficiency of the existing highway are justified including:
 - (a) seal widening to 10m;
 - (b) additional passing lanes; and
 - (c) realignment of the curves south of Foxton.
- 30. Some preliminary consideration has been given to the economics of constructing new passing lanes as sections of dual carriageway which could ultimately form part of a four-laning strategy (although it is expected that four laning will not be required for more than 20 years). A preliminary assessment is that the extra costs of dual carriageways compared to normal passing lanes may be justified by accident benefits.
- 31. The other issues which have been addressed on these sections is the need to ultimately replace the Whirikino Trestle Bridge across the Motua Floodway and whether there is a need ultimately for another bypass of Foxton. The 1.2 km Whirokino Trestle Bridge is nearing the end of its economic life and a replacement bridge which would only need to be 600 m long would cost \$10-12M. Such a replacement bridge could be constructed as part of a new bypass of Foxton.
- 32. Between Foxton and the Whirokino Trestle Bridge, there are a couple of substandard curves where there have been recent accidents. While these curves would be bypassed by any new Foxton bypass and replacement Whirokino Trestle Bridge, it is probably more economic to realign these

curves now and defer any replacement of the Whirokino Trestle Bridge and construction of the Foxton Bypass.

33. However, this strategy needs to be confirmed by a more detailed investigation into the structural life of the Whirokino Trestle Bridge. When this bridge was examined in 1997, its residual life was assessed to be no more than about 10 years but this is now being reviewed.

Implementation

34. There are likely to be components of the work proposed between Waikanae and Levin, including sections of the Levin bypass that can be constructed in the near future. Consideration will need to be given, however, to an implementation strategy for the entire route. Further work is required to finalise such an implementation strategy and to confirm the costs and BCRs of the various sections this would form a basis for developing such a strategy to facilitate the contiguous development of the route in its entirety.

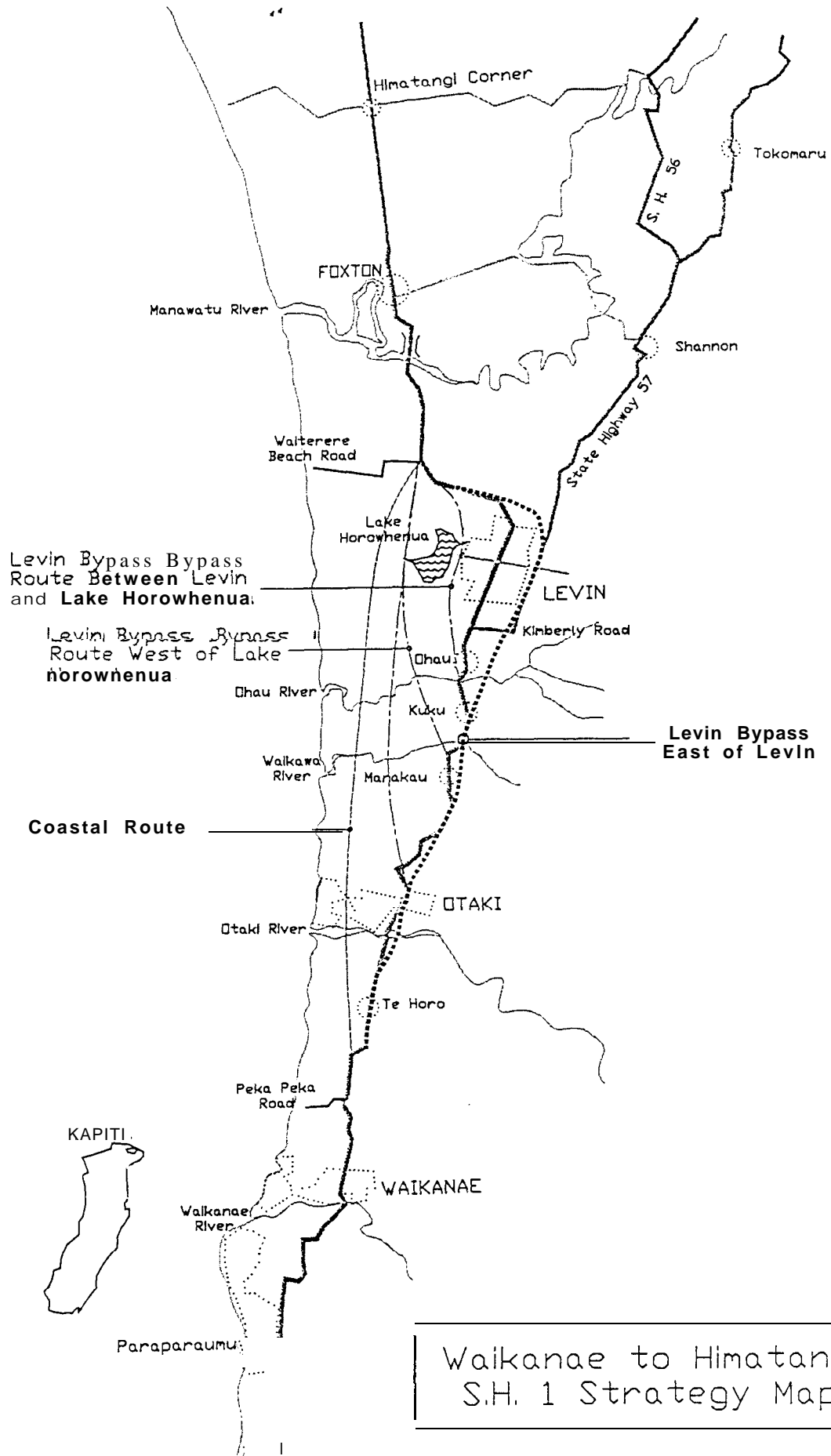
Consultation

35. During the development of this broad strategy, consultation has taken place with Tangata Whenua, all affected Territorial Authorities, Department of Conservation, NZ Archaeological Association, Historic Places Trust, Tranz Rail and Horowhenua commercial interests amongst others. The nature of the discussion has included meetings, newsletters, media spreads and the distribution of information packages to these parties. The consultation had been regarded as 'preliminary', until such time as a preferred option is developed.
36. A significant outcome from the consultations with HDC is its preference for a bypass to the east of Levin rather than having four lanes constructed through the main street or having a bypass to the west near Lake Horowhenua.
37. It is now proposed to publish the broad strategy of developing a four-lane highway in the existing corridor between Waikanae (Peka Peka) and Levin, developing an eastern bypass of Levin, and retaining the existing two-lane highway north of Levin. This strategy will be presented to the Kapiti Coast District Council (KCDC) and HDC, the local community boards, and other interested parties. It will need to be emphasised that the detailed alignment, including whether the highway is to remain on the existing alignment or be shifted to a new alignment has not been determined for each section but, rather, is a matter for the detailed scheme assessment phase.
38. The outcome of this communication process will be reported back for the Authority to confirm the strategy, as appropriate. The adopted strategy will then form the basis of detailed scheme assessments of each section and for lodging notices of requirement for designation with the KCDC and HDC.

Resolutions:
~~Recommendations~~

39. That the Authority:

- (a) notes the proposed strategy for State Highway 1 between Waikanae and Himatangi comprising:
 - (i) a four lane highway in the existing corridor between Waikanae (Peka Peka) and Levin;
 - (ii) a two-lane eastern bypass of Levin;
 - (iii) retaining the existing two-lane highway north of Levin with improvements including:
 - . seal widening
 - . additional passing lanes
 - . a short realignment south of Foxton;
- (b) notes that a four-lane highway between Waikanae and Levin is likely to have some sections on the existing alignment and some sections of new alignment, which will be an issue to be resolved in scheme assessments;
- (c) agrees to publicise and present the proposed strategy to the Kapiti Coast and Horowhenua District Councils, community boards and other interested parties and request the Chief Executive to report back on the results of this consultation process for the Authority to confirm the strategy, as appropriate; and
- (d) notes that the proposed strategy will now form the basis of detailed scheme assessments of the various sections.



Waikanae to Himatangi
S.H. 1 Strategy Map

Traffic Improvements at State Highway 1/Beach Road Intersection, Paekakariki Project Newsletter 1: November 2000

(2)

Background:

Transit New Zealand has recently approved a package of intermediate and short-term measures to improve the safety of the section of highway between Pukerua Bay and MacKays Crossing. The overall objective is to increase driver awareness on this windy and partly narrow stretch of highway so drivers will take extra care, reducing both the number of accidents and the delays due to these accidents

Accident problem at Beach Road intersection:

As part of the improvements, specific modifications will be implemented at the State Highway 1/Beach Road intersection to reduce the high number of accidents involving vehicles from Beach Road colliding with through traffic on the highway. In the past five years, seven of the 20 accidents reported in the vicinity of the intersection have involved collisions with vehicles turning right out of Beach Road being hit by northbound through traffic.

Accident causes:

A number of causes for right turn accidents have been identified. These include:

- the difficulty for drivers waiting at Beach Road to determine which approaching vehicles are turning left into Beach Road and which are continuing north
- the tall trees on the west side of the highway frequently cast a shadow across

the road reducing the visibility of northbound vehicles on the highway

- high approach speeds reduce the amount of time available for drivers entering from the side roads to make judgements.

Action proposed:

The action proposed to reduce the accidents at the intersection include:

- lengthening the left turn lane into Beach Road to provide better separation between the through lane and the left turn lane
- removing an approximate 40m length of pohutukawa trees between the highway and the railway line
- installing traffic islands to better define entry and exits for the service station

Ancillary work associated with the railway level crossing will also be undertaken at the same time.

Some of the pohutukawa trees south of the intersection need to be removed to widen the highway while others are being removed to reduce the shadow affect and improve visibility at the intersection. Approximately a fifth to a quarter of the length of the pohutukawa trees will be removed. The whau trees are not affected by this work.

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Alternative options to removal of trees:

Transit recognised the impact of removing the trees and made every effort to explore alternative solutions.

Options considered included:

- trimming the trees. The amount of foliage needed to be trimmed, together with the trees that had to be removed for the widened highway, meant that mainly tree trunks would be left. This option was discarded on the basis of aesthetics.
- transplanting the trees to another site. Advice received was that due to the size of the trees they would be difficult and costly to remove and that there was a high risk that they would not survive transplanting.

Mitigation measures:

Transit is committed to reducing the environmental effects of the safety improvement project and will undertake significant landscaping work to help mitigate the tree removal. This includes:

- reshaping the area the pohutukawa trees will be removed from
- topsoiling and grassing the area adjacent to the modified left turn lane

These mitigation measures will not only complement the traffic improvements at the intersection, but also enhance the appearance and entrance to the township of Paekakariki.

The proposed intersection layout with the planting mitigation is shown on the attached drawing.

Consultation:

Transit and their consultant on the project, opus International Consultants, have consulted widely on this proposed highway safety improvement. This has included discussion with the Paekakariki Community Board, Kapiti District Council, Wellington Regional Council, Department of Conservation, Tranz Rail Ltd, Kapiti Environmental Action, New Zealand Forest and Bird Protection Society, Ngati Toa and Ngati Haumia.

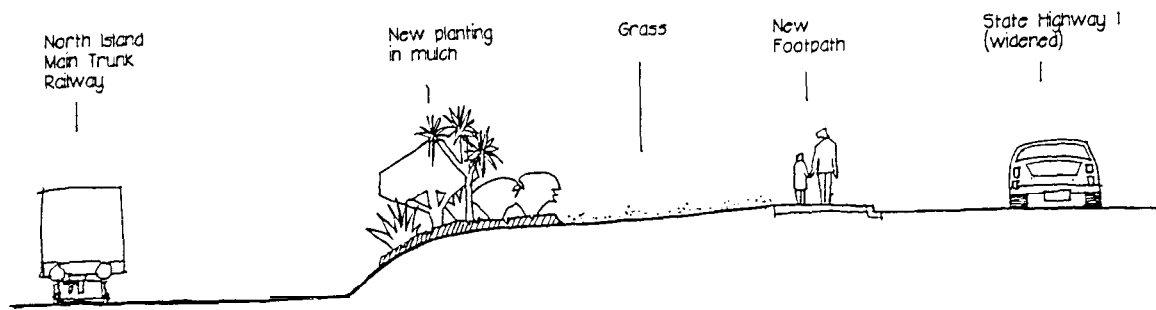
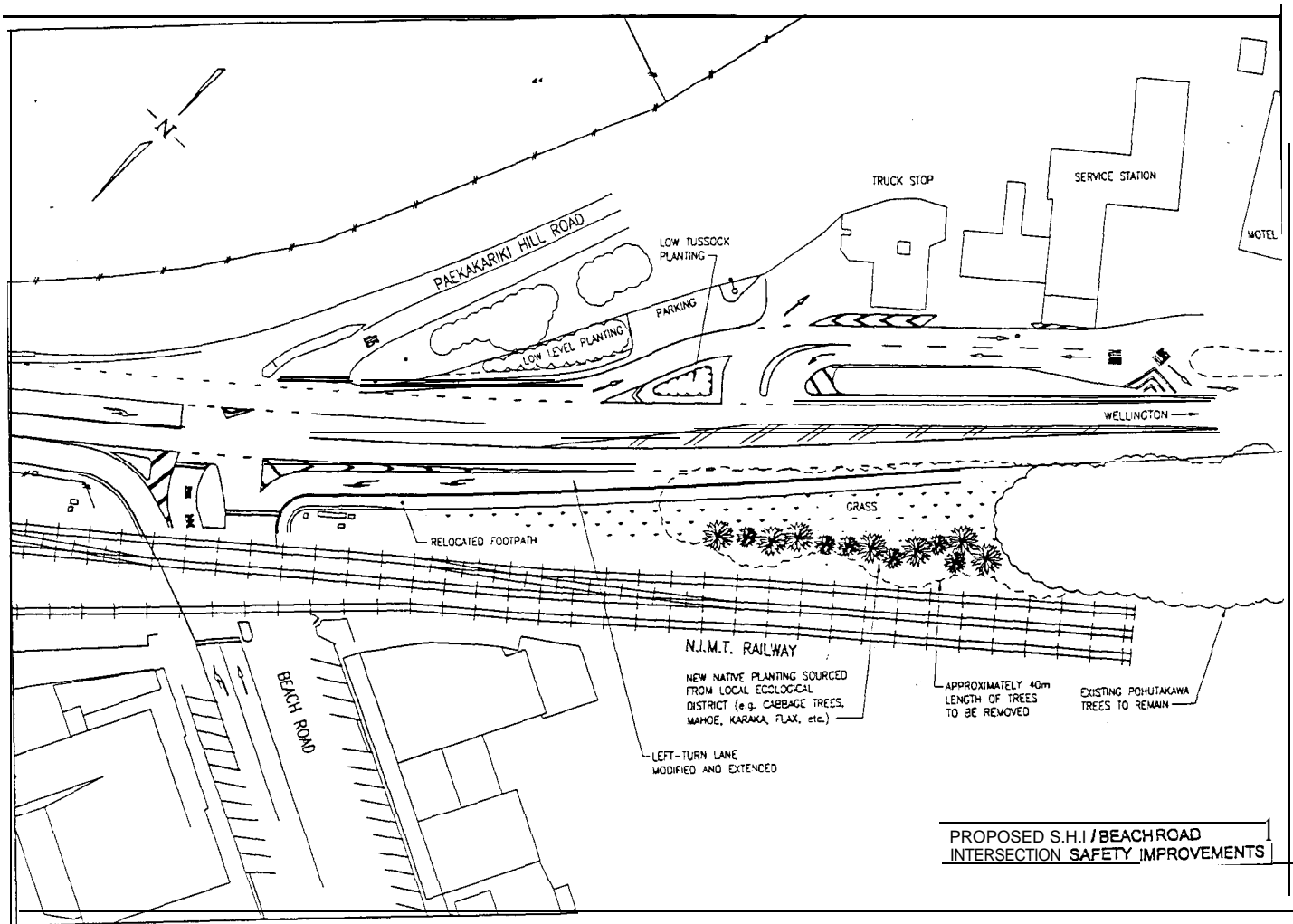
Where to from here?

Detailed design and land purchase for the project is currently underway. It is expected that construction of the project will commence in late March 2001.

For further information on this project, please contact:

Julie Boucher, opus International Consultants Ltd, phone (04) 47 1-70 17, or

Catherine Worsley, Transit New Zealand, phone (04) 801-2580.



TYPICAL CR055 SECTION OF NEW PLANTING

4 October 2000

MEDIA RELEASE

Transit to make SH1 safer

A package of immediate and short-term improvements to make SH 1 from Pukerua Bay to Mackays Crossing safer was approved today by the Transit New Zealand Authority.

“Our goal is to make this stretch of road so conspicuous that people will immediately improve their driving behaviour and we will see a drop in the crash rate,” says Transit’s Wellington regional manager Dave Rendall.

The overall strategy is to increase driver awareness that this is a section of highway on which drivers must take extra care. Transit will also encourage the Police to focus on speeding drivers, as they have been a factor in crashes.

The Authority also supported further investigation of longer-term improvements.

“Transit believes both the immediate and longer-term actions outlined below will be a big step in addressing the problems of this stretch of highway until Transmission Gully is built,” says Mr Rendall.

Coastal Section: Pukerua Bay - Paekakariki

The main deficiencies of this stretch of highway are poor sight distances due to the hill on one side and the seawall on the other, limited passing opportunities, and seal width which is below the desired minimum.

Analysis of crash data shows that the crash rate is approximately three-quarters of the New Zealand average but there is a higher proportion of serious accidents. There is also a higher rate of crashes in wet weather. A disproportionate number of crashes, 62 per cent, are in the southbound direction and there has been a concentration of accidents at the end of the southbound passing lane. Transit proposes to close this passing lane. The lane is some 220 metres shorter than the current desired standard.

Immediate improvements include:

- close the existing southbound passing lane
- install:
 - oversized** “No Passing x-kms” signs on both northbound and southbound approaches with reinforcement signs on each side of Paekakariki
 - “Accident Area”** signs at either end of this section, northbound at Pukerua Bay and southbound south of Mackays Crossing, with reminder signs at Fisherman’s Table
 - 6km, 4km and 1km** advance-warning signs of the next passing lane
 - duplicate** signs on both sides of the highway where appropriate, **replace** the 100km/h signs with new oversized de-restriction signs and **review** curve speed advisory signs, chevron curve indicators, chevron sight and speed boards

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red reflector markers on the edge lines at half their normal spacing and replace those close to the end of their reflective life

double-yellow no-overtaking vibra-lines from the northern limit of Pukerua Bay to MacKays Crossing, including the straight south of Fisherman's Table

- upgrade edge marker posts
- paint the seawall to improve its reflection at night
- re-mark limit lines for vehicles exiting Fisherman's Table
- liaise with the Police to promote higher levels of speed enforcement including installation of fixed speed cameras to reduce higher speeds and also make mobile speed camera sites safer and more accessible
- undertake further speed surveys "before" and "after" at various locations along the coastal section.

These improvements will cost approximately \$190,000 and work will begin immediately.

Another improvement to be implemented in the next two - six months involves installing stub-ends on the edge lines which encourage drivers to slow down. These are only being trialled in Australia at the moment and have not yet been used in New Zealand. Right-turn bays will be built at Fisherman's Table and visibility improved by cutting back the bank to the north of the intersection.

Previous work on the coastal section has indicated that increasing the road width is limited by economic and environmental factors. Installation of a median barrier is not feasible due to the narrow width of the road. The footpath would need to be replaced by a cycling/pedestrian shoulder or relocated to the seaward side of the wall.

Other proposals include: installing variable message signs and camera monitoring (ATMS), as in the Ngauranga Gorge, installing smart stud lit centre line markers and other highway lighting to assist night driving, installation of no-stopping restrictions, and closing of some rest areas.

Beach Road intersection with SH 1

This is a very busy stretch of highway with traffic volumes of approximately 23,000 vehicles per day (vpd) with side road volumes of about 1,500 vpd on Beach Road and 500 vpd on Paekakariki Hill Road.

Work to date on analysing the problems at this intersection has identified four principal problems. They are: the risk of crashes, particularly involving traffic turning right out of Beach Road, delays to traffic entering the state highway from the side roads, the close proximity of the railway line to the state highway, and the location of the access to the service station and motel just south of the intersection.

The short-term improvements to the Beach Road/SH 1/Paekakariki Hill Road intersection are detailed below. These were decided upon after consulting with local groups such as the Kapiti Coast District Council, the Paekakariki Community Board, Kapiti Environmental Action, local iwi, the BP service station owner and DoC, Trans Rail, and NZ Forest and Bird.

Visibility for vehicles turning right out of Beach Road onto the highway will be improved by realigning the highway to separate straight through and left-turning traffic and the removal of 40-50 metres of trees. There will also be some redefinition of the road for improved access to and from the service station (see plan).

Other short-term improvements to be implemented include:

- additional lighting to the south of the intersection to improve visibility at night over the full sight distance of 200 metres
- removal or relocation of the bus shelter to improve visibility to the north
- modifications to the approach from Beach Road to reduce the gradient for right-turn traffic as much as possible to provide a level platform for vehicles waiting to turn right and so reduce the effect of the existing gradient on drivers' ability to accelerate from a stationary position
- enhanced signage to be integrated with improved signage on the entire coastal section.

The work on these improvements will start in January and take about two - three months to complete.

Over the next two – six months further actions will include threshold treatments at Paekakariki to highlight that you are entering a township area.

The cost of the above is estimated to be \$225,000.

Longer-term solutions considered include: traffic signals, a roundabout, grade separation and alternative access to Paekakariki.

Both the traffic signals and roundabout options have been discarded for lack of space and safety reasons. At this stage the grade separation of Beach Road only has a benefit cost ratio (BCR) of 1.5, not sufficiently high to attract funding. There is, however, a range of options that could be investigated in more detail in a scheme assessment.

A further possibility is to provide an underpass at Ames Street so as to effectively grade separate the right-turn exit from Paekakariki at the south end. This has a BCR of approximately 3.1 and so is potentially an economically viable project.

As the roads in Paekakariki township are the responsibility of the Kapiti Coast District Council, Transit will work with the KCDC in developing these latter proposals.

The Transit Authority also considered on Wednesday strategies for property acquisition and planning consents that would allow for the early construction of Transmission Gully. After discussion with the parties directly affected, Transit will shortly release this information.

ENDS

For further information contact:

Dave Rendall: Tel 04 801 2580 or 025 907 960

Or

Deborah Willett Tel: 04 496 6653

Plimmerton to Pukerua Bay (The Rural Section): State Highway 1 Project Newsletter 1 November 2000



View of the Rural Section

Background

The section of State Highway 1 between Plimmerton and Pukerua Bay, just north of Wellington, is known as The Rural Section. It is 3.5km long, stretching from the weigh station at Plimmerton to just south of Pukerua Bay.

The road has a high traffic volume at over 23,000 vehicles per day, accommodating the commuters travelling between the Kapiti Coast and Wellington on a daily basis, and also providing access to the north of the island.

In the past five years there have been over sixty accidents along this 3.5km section of State Highway 1.

The project objective

The project is aimed at improving the safety and is expected to halve the accident rate on this stretch of highway.

With this aim in mind, the project consists of:

- Realigning the road and upgrading it to two lanes in each direction
- Separating traffic by building a median barrier

- Construction of a new intersection to improve turning opportunities on and off the highway at Airlie Road/State Highway 1

Environmental considerations

When Transit first looked at the project a major consideration was ensuring both ecological issues and roading requirements could be balanced. The Taupo Swamp, a nationally significant ecosystem borders the state highway.

Transit is working with the Queen Elizabeth II National Trust (the landowner) and Department of Conservation to put in place measures to minimise impacts on the swamp during construction.

Project outline

The project, which commenced in February 2000, is working towards an August 2001 completion date.

The size of the project has required careful planning and coordination to ensure both minimum disruption to road users and that the construction deadlines can be met. The project has three major components:

- Part 1 - Bulk earthworks off the existing highway and including the establishment of till sites and the extension or installation of culverts

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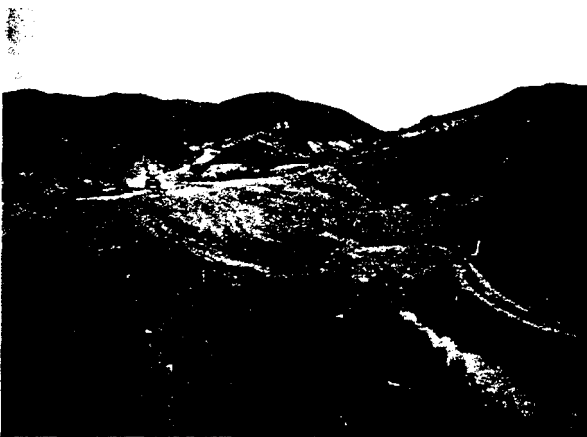
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- Part 2 - Road construction involving work on both the new and existing road alignments, and including the installation of the median barrier. During this stage there will be disruptions to traffic flow
- Part 3 - Landscaping and finishing work including roadmarking and new signs.

Part 1 -Bulk earthworks



Establishing northern fill site May 2000



Northern fill site August 2000

Over the past eight months there has been minimal disruption to the motoring public as the majority of the work has been completed off State Highway 1. To date the following has been achieved:

- Two fill sites have been established
- A haul road has been built to the northern fill site near Airlie Road
- Over half of the earthworks has been completed (360,000 m³ of 500,000m³)

- Five culverts have been extended under the new state highway alignment
- North of Airlie Road a large culvert has been completed

November 2000 to August 2001 construction programme

Construction work will start on and near the state highway in early November. This part of the project will concentrate on realigning and widening the current highway and installing the median barrier.

Both north and southbound passing lanes will close during the next three months to provide a safe environment for motorists and construction workers. Once the lanes close they will remain so until the project is completed in August 2001.

Temporary road signs, reducing the speed to 70 km/h, through the construction area will be erected to assist in managing traffic flow through the construction site. In some cases motorists may want to retime their travel or consider alternative transport means.

Concurrently a new intersection will be built at the Airlie Road/State Highway 1 intersection to improve turning movements on and off this road.

The landscaping programme includes grassing of the new cut batters and planting of native vegetation between the new road and Taupo Swamp, and on the eastern side of the highway at a number of locations. The hydroseeding of the cut batters is being done as they are completed. All of the grassing and planting will be completed by August 2001.

Where to find further information

In addition to regular road reports, further information on the project can be found on the Transit website on www.transit.govt.nz or contact:

Catherine Worsley, Project Engineer
Transit New Zealand, PO Box 27477
Wellington
Phone: (04) 801 2580
Or
Terry Catley, Project Consultant
Beca Carter, PO Box 3942
Wellington
Phone: (04) 473 7551

State Highway 2 (5) Dowse To Petone Upgrade

Background

Earlier this year Transit New Zealand (Transit) undertook an extensive consultation process seeking the community's input on options developed to improve State Highway 2 (SH2) between Dowse Drive and Petone.

The consultation process has allowed Transit to further investigate concerns and suggestions raised and, where possible, these changes have been incorporated into the preferred design options for the project.

This is the sixth newsletter in a series published by Transit to keep the public informed on the development and progress of the project.

Meetings Held

Several public meetings have been held from July to October 2000 in response to public concerns over the issues of increased traffic on Hutt Road and the loss of direct access from Korokoro to SH2.

These meetings followed the three Open Days held by Transit in Alicetown, Korokoro and Maungaraki.

Issues Investigated After Consultation

Transit has investigated the

concerns, issues and suggestions raised by the public during the consultation process. The investigations and consequential changes include:

Korokoro Intersection

At the request of the Korokoro residents, Transit further investigated an option to retain a set of traffic lights at the Korokoro intersection. Transit has undertaken traffic modelling of this option and concluded that the Overbridge would better address safety issues and improve traffic flow on SH2.

Transit has now modified its design to include provision for north bound motorists to access

Korokoro from SH2 rather than using either the Dowse Interchange or Petone Overbridge.

Percy's Reserve

Transit, in consultation with Hutt City Council (HCC) and the Department of Conservation (DoC), have developed a new layout for Percy's Reserve to mitigate the effects of the incursion by the highway. Transit is currently finalising the details of the new layout with HCC.

Intersection for the Dowse Interchange and Hutt Road

Two types of intersections (traffic lights and roundabout)

continued overleaf...



Computer Simulation of Dowse Interchange viewed south of SH2

for the Dowse Interchange/Hutt Road intersection were displayed at the previous Open Days. The roundabout option is now preferred because it provides a freer flow for through traffic and better property access and parking along Hutt Road.

Petone Railway Station Park and Ride

Access to and from the Petone Railway Station carpark was identified as a concern during consultation. Transit in consultation with the Wellington Regional Council (WRC) and Tranz Rail has incorporated and extended a new carpark layout into its design and an additional carpark west of SH2 with improved access.

Provisions for Cyclists

Cycle groups suggested some modifications to the designs particularly for the proposed Dowse Interchange. In response to these suggestions, Transit has increased the width of the shoulders on the Interchange, the on/off ramps and on SH2 between Korokoro and Petone.

Cut Slope Near Magnolia Grove

Concerns were raised regarding the proximity of the cut into the slope at Dowse Drive to residential properties in Magnolia Grove. The design has been modified to reduce the size of the cut slope and moved the top of the cuts away from properties on Magnolia Grove.

Concluding Open Days

The final design, incorporating changes, will be available for

the public to view in two concluding Open Days scheduled for 25 November 2000 (Saturday) at Hutt Central School Hall, Railway Avenue, Lower Hutt between 2 - 6pm. On the 28 November 2000 (Tuesday) at George Nicholson Hall, Korokoro School, Korokoro, between 4 - 8pm. Staff from Transit, HCC and Beca will be available to discuss the project and the changes incorporated.

Project Web Site

Information on this project is available for viewing on Transit's web site at the following address: <http://www.transit.govt.nz>. Selecting the sub title "Projects" allows access to the SH2 Dowse to Petone Upgrade web pages.

Future Programme

Transit anticipates lodging the resource consents application with the consent authorities in early March 2001. The public will be able to make

submissions on the applications that will be publicly notified at that stage. The consent process is expected to take several months to complete before final designs are finalised and construction commences. Transit anticipates that the construction of the Dowse Interchange and Korokoro Overbridge will be undertaken between 2002 and 2004.

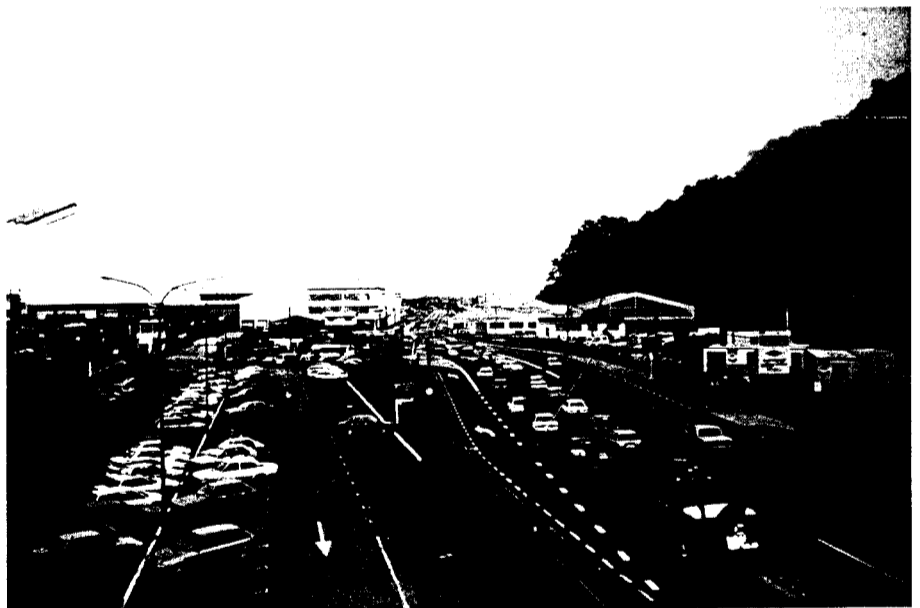
If you wish to receive copies of the newsletter(s) or require any further information, please contact:

Steven Kerr or Christine Chong

Phone (04) 473 755 1
Fax: (04) 496 2539



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Beca Carter Hollings & Ferner Ltd
190 Thorndon Quay
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Congestion at Korokoro

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SH1

Blenheim Upgrade

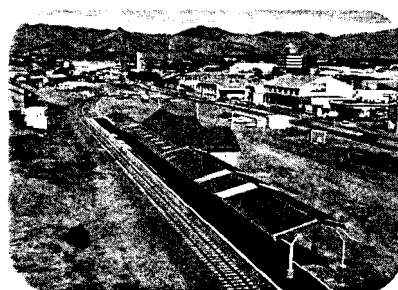
Stage One of the State Highway 1 Blenheim Upgrade project to improve safety and traffic flow at several locations along SH1 through Blenheim has been successfully completed.

The railway track between the existing railway bridge over the Taylor River and north of Dillons Point Road was relocated on schedule and the new station platform is almost finished. Blenheim's historic railway station building has been moved from beside the state highway to

alongside the relocated track and is currently being refurbished by the Marlborough District Council.

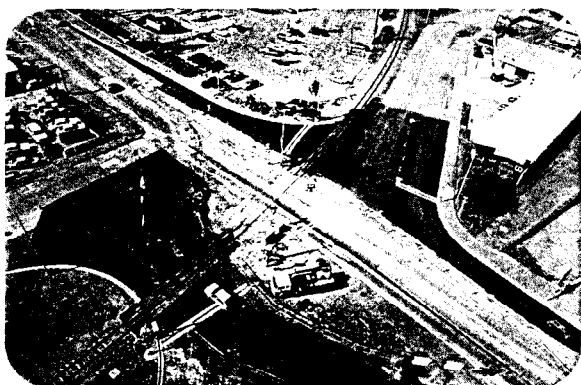
Currently under construction are three major roundabouts, a new bridge over the Taylor River and a new commuter car park and bus park at the station.

All three roundabouts are progressing well - traffic has been diverted to part of the new Main Street roundabout. Bridge construction is also well underway with seven of eight piles completed.



The relocated railway line which was opened on 20 August

Work on the \$4 million project started earlier this year and is programmed to be completed by April 2001.



One of three new roundabouts being constructed along State Highway 1 as part of the Blenheim Upgrade Project



The new bridge currently under construction over the Taylor River



Clean Up New Zealand

This year over 200,000 New Zealanders participated in removing rubbish from highways, beaches, reserves and communities in New Zealand's biggest environmental clean up as part of Clean Up New Zealand week from 18-24 September.

Staff from the Wellington Regional Office assisted a Tasman District Council initiative targeted at cleaning up Appleby Straight, SH60, Nelson and between Richmond and Wakefield on SH6, where they collected four truckloads of rubbish. Other Wellington Regional Office staff collected rubbish on SH2 in the Wairarapa and in Upper Hutt at Moonshine Bridge.

Kuru Love said it was great to be part of a community driven initiative aimed at cleaning up the highways. (continued back page)

INSIDE:

- Basin Reserve Long Term Strategy
- Pauatahanui Bridge Replacement
- Elevation Bridge Upgrade
- Glenhope to Kawatiri
- Plimmerton - Pukerua Bay
- Ngauranga Gorge ATMS
- Recent Appointments



Basin Reserve Long Term Strategy

Transit New Zealand has formed a community based consultation working group to assist in developing long-term transport solutions around the Basin Reserve.

The Basin Reserve is a unique part of Wellington. It combines an internationally recognised cricket ground with a complex one way circulatory road system. The roads function as a major hub of urban arterial roads together with extensive local access.

While interim improvements were recently completed there is a need to investigate long-term transport solutions for the area. The project will consider the strategy for the next 10 to 20 years.

Major areas to address include:

- ⇒ Improving interaction between arterial traffic and local traffic/local access
- ⇒ Congestion during peak periods
- ⇒ Improving safety for cyclists, pedestrians and vehicles
- ⇒ Safety of access to the Basin Reserve complex and Mount Victoria

Rod James, project manager, says it is essential that any long-term solutions are developed with the support of the community and the local authority.

“We need a strategy that addresses safety issues, traffic flow and access issues in the area. A community consultative working group will be able to provide valuable input on option development and evaluation.”



Pauatahanui Bridge Replacement

Pauatahanui's Bridge Replacement project is one step closer with construction funding recently approved for the \$3 million project.

Pauatahanui Bridge is located approximately 30km north of Wellington at a major intersection of State Highway 58 with Paekakariki Hill Road.

It is the sole remaining single lane bridge on a major arterial route in the Wellington region and causes considerable delays when vehicles have to slow or stop to cross the bridge. It is also the site of a high number of non-injury crashes.



Digging at the excavation site on Henderson's Bend, SH58 as part of the Pauatahanui Bridge Replacement project

A two lane bridge will be constructed about 150 metres upstream of the existing bridge. The single lane bridge will remain for access to adjacent properties and pedestrian and cyclist use.

A roundabout will be constructed east of the new bridge to provide access to Pauatahanui village from SH58.

Construction is expected to begin before Christmas and be completed by August 2001.

Transit arranged for an archaeological dig at Henderson's Bend on SH58 to be carried out by the New Zealand Historic Places Trust. The purpose of the dig was to excavate samples from the area in order to learn more about the early settlements on the shores of Pauatahanui Inlet.

Preliminary findings included evidence for a large number of hangis (ovens) suggesting that the site was once occupied by people, rather than simply being a place where shellfish were processed and shells dumped. As well as evidence of hangi, archaeologists have found a range of shell species from different environments including the estuary and rocky shore, and fish, bird and mammal bones. Two argillite adzes and a piece of obsidian were also recovered.

If you require information on Wellington Regional Office projects please contact Philippa Ross on (04) 801 2580 or email Philippa.Ross@transit.govt.nz

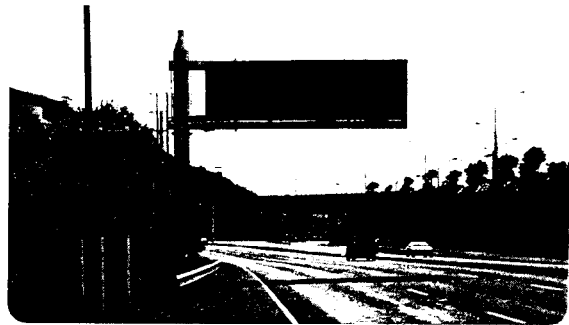
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Ngauranga Gorge ATMS



Installing part of the active traffic management system (ATMS) along Ngauranga Gorge



One of six new variable message signs (VMS's) installed at various points between Johnsonville and the State Highway 1 and 2 interchange along Ngauranga Gorge as part of the ATMS. The VMS's will relay information on incidents or road conditions, mandatory speed signs and lane availability signs



Clean Up New Zealand continued

"The amount of rubbish and debris continually dumped on the roads is a real concern. It can be hazardous to both road users and the environment," he said. "While it was great to be part of the cleanup, the real message is to dispose of rubbish in the appropriate place, not on the road."



Staff from Transit's Wellington Regional Office and Tasman District Council participate in Clean Up New Zealand Week by picking up rubbish along SH6 near Nelson



Recent Appointments



Marice Jackson has been appointed as a project engineer in the Wellington Regional Office. She has several years' experience in various areas of the roading industry. Marice has recently shifted from Auckland where she was employed as a project manager for Works Infrastructure within the surfacing department. She is looking after several projects, including those on the Rimutaka and Kaitoke Hills and also several in the Blenheim area.



Mary Falconer has been appointed as a graduate engineer after recently completing her BE at Canterbury University where she specialised in hydraulic and geotechnical engineering within a wide range of engineering disciplines. Mary is managing several projects, including Spooners Summit upgrade (SH6) and the SH60 strategy study.



Gavin Gregg has been seconded from OPUS for six months to manage several large projects including the Peka Peka Hadfield Roads intersection and the structural bridge contracts. Gavin has had extensive experience in roading engineering, much of it project work in the Wellington/Nelson areas.

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SH1

Elevation Overbridge Upgrade

Plans for construction of a new \$1.5 million railway overbridge to the south of the existing Elevation Overbridge have been approved.

Elevation Overbridge, approximately 2.5km south of Picton on State Highway 1, has a poor safety record and has been the scene of a number of accidents in recent years.

The new overbridge has been designed to improve safety for motorists. The width of the current bridge is inconsistent with the sealed width of the approaching roads. Furthermore, there are

two S bend alignments that require motorists to significantly reduce their speed to travel over the bridge.

A realignment of the current approaches will allow motorists to cross the new bridge at a speed of 90km/h, consistent with the surrounding environment

Designation and planning consents should be lodged in the next couple of months.

SH6

Glenhope to Kawatiri

Work is soon to start on the realignment of State Highway 6 between Glenhope and Kawatiri, about 80km south of Nelson, after two years of investigation, planning and consultation.

The \$6 million project aims to reduce the accident problem on the 10km winding section of highway from the foot of Hope Saddle to Kawatiri Junction.

Construction will include:

- ⇒ Replacing the single lane Glenhope Bridge with a two lane bridge

⇒ Widening two other bridges

⇒ Creating north and south bound passing lanes at the Glenhope end of the project

Designed to complement the environment, the realignment will generally follow the existing highway and make use of the adjacent ex railway reserve to minimise the impact on the Kahurangi National Park.

Transit has divided the project into three sections to reduce the length of roadworks at any one time in an effort to minimise disruption to motorists.

SH1

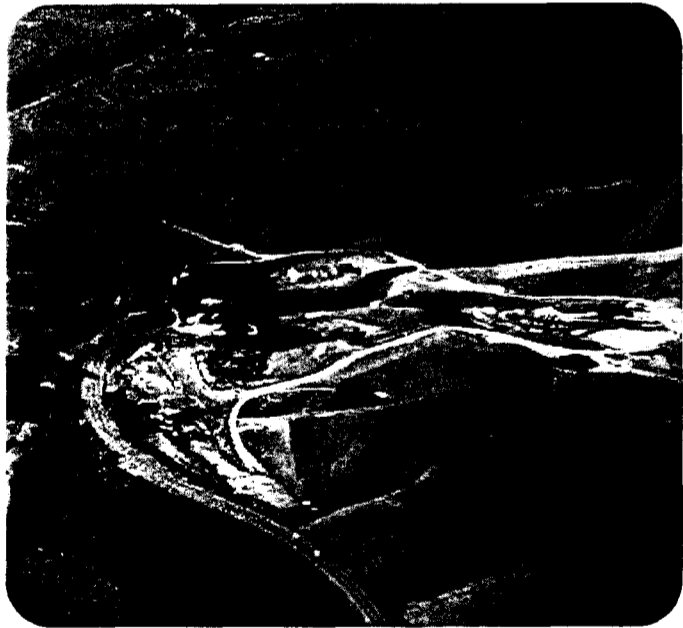
Plimmerton - Pukerua Bay

Seven months into improving the 3.5km rural section of State Highway 1 between Pukerua Bay and Plimmerton, over half of the major earth works have been completed.

Over 330,000 cubiometres have now been moved and five culverts extended or installed.

When Transit first looked at the Plimmerton to Pukerua Bay project a major consideration was ensuring both ecological issues and roading requirements could be balanced.

Taupo Swamp on the western side of the highway is a nationally significant ecosystem with a range of native flora and fauna. A monitoring programme has been put in place with regular meetings between Transit, Hayes Earthmoving Services (the contractor), Beca Carter Hollings & Ferner, (the project consultant) and Queen Elizabeth II National Trust. Contingency plans have also been developed.



Rural section between Plimmerton and Pukerua Bay on State Highway 1

Please Quote Ref: SH/9/1/TG
DR:GH1862

10 October 2000

CF

Wellington Regional Council
P O Box 11646
WELLINGTON

Attention: Tony Brennand

Dear Sir

TRANSMISSION GULLY MOTORWAY

Further to the planning workshop held related to early construction of the Transmission Gully Motorway (TGM) in August, the Transit Authority resolved on 4 October to proceed with all activities required to enable early construction of TGM. In particular the Authority resolved to:

- Commence property acquisition for all critical properties, and secure land required for advance mitigation works. Where appropriate, land required for the advance mitigation works will be leased in order to secure the necessary land.
- Initiate further geotechnical and other investigations, together with preliminary design work to support the necessary remaining resource consent applications, and refine construction cost estimates; and
- Continue to consider the likely procurement strategy for the construction of the route as the above actions proceed.

Transit will be seeking funding from Transfund for this additional activity as soon as practical.

Project Programme

There are two likely programmes for the project. These are based on two options for the engagement of the physical works contractor being conventional procurement which would be based on a "definitive" form of consents, and a design/refine/build concept based on "generic" consents. Both of these programmes assume all necessary funding approvals and legislation will have been obtained by June 2002. The earliest completion date based on either conventional procurement or the alternative procurement delivery methods is the end of 2006, based on the key

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assumption that mitigation planting will only need to be in place for three years prior to commencement of earthworks.

This date makes no allowance for either compulsory land purchase or appeals against the resource consents. If compulsory purchase of land is required, the completion date could be delayed until June 2007, and if there are appeals against resource consents, completion could be delayed until December 2008.

The programmes show a critical go/no go hold point for TGM as the date by which legislation needs to be passed, and funding confirmed for the "early" construction of TGM. This hold point is currently programmed at mid 2002, but the feasibility of whether this date is achievable needs to be confirmed urgently by WRC.

Clearly, if a reduced period for mitigation planting of less than three years is agreed, there would be potential to advance the programme.

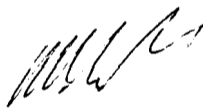
Closure

In summary, preliminary assessment indicates the earliest completion date of TGM to be December 2006, assuming an immediate commencement of activities outlined above, and provided:

- There is early resolution of the Paremata Residents' Association appeal and the resolution of any subsequent appeals of resource consent decisions;
- No compulsory land acquisition is needed, including mitigation areas required as conditions on the designation;
- Agreement to a three year mitigation retirement period (or less); and
- WRC securing the means of funding and all necessary legislation is confirmed before mid 2002.

I will call shortly to discuss progress on our respective activities, and your confirmation that June 2002 is achievable in terms of securing the necessary commitment to funding and passing of the required legislation.

Yours faithfully



D Rendall
REGIONAL MANAGER