

TGM and SH1 designation conditions – Initial Thoughts

When the Environment Court in 2001 approved proposals to install clearways on SH1 through Paremata and Plimmerton, it imposed a large number of conditions which Transit NZ (now NZTA) was required to follow. One of those conditions directed that, prior to the completion of the Transmission Gully Motorway (TGM), NZTA should consult with PCC, GWRC, Paremata Residents Association, Plimmerton Residents Association and Ngati Toa Rangatira on a number of matters relating to how the existing roads should operate in the future.

The initial thoughts of the Paremata Residents Association on those matters are set out below. These thoughts are based on a long history of dealing with NZTA and its predecessors on roading issues, previous commitments made to the coastal communities, long-held concerns for the future of the Porirua Harbour and previous feedback from the Paremata community. It may be, however, that the views of the community on some issues have changed and we are currently seeking more feedback and ideas from the community which could affect our position on these matters. And, of course, the views of NZTA and the other groups being consulted could also influence our position.

(a) Ownership and control of the existing roads (Paremata Road, Mana Esplanade and St Andrews Road)

For virtually all of its existence, the main road through Paremata and Plimmerton has had mixed functions as both a state highway and a local community road. When the Paremata Bridge was opened in 1936, it was originally constructed to serve the developing communities at Dolly Varden (now Mana), Plimmerton and Pukerua Bay. The bridge was paid for largely by increased rates levied on the ratepayers of those communities. Subsequently, extension of the coastal route to Paekakariki was taken up as a project to celebrate New Zealand's centenary and the new Centennial Highway was opened in 1939.

For many decades there have been tensions between NZTA (or its predecessors) and the local communities, mainly because whenever there has been a need to balance state highway issues against those of the local community, state highway interests have almost inevitably received precedence. As just one example, correct use of the clearway lanes through Mana has never been enforced, giving the strong impression that the safety and health needs of residents and others have not been deemed as important as avoiding delays for through traffic.

On most issues, previous Councils have tended to support the local communities – but where they haven't done so, it has mostly been for political reasons or because they didn't want to upset NZTA as the major source of roading funds.

If we continue with NZTA ownership and control into the future, we can expect these past tensions to continue also and there could be a real danger that, for instance, greater importance will be given to the existing road's future role as an alternative route in the event of emergencies, than to its everyday role as a road servicing local communities and determining the way those communities are able to develop.

For these reasons, we suspect that many long-standing Paremata residents would prefer the roads involved to be controlled by the Porirua City Council as the local authority elected (and accountable) for looking after our interests – providing that the control and maintenance were sufficiently subsidized by NZTA (because of the high costs associated with its past development as SH1 and its future role as an alternative route to Transmission Gully).

We also appreciate, however, that most Councillors and Council staff are very concerned at the prospect of having to take on the extra responsibility for, and possible funding of, such an important community asset. Their fears - and those of NZTA itself - are probably heightened by knowing that NZTA would have difficulty in being able to hand over the existing SH1 in a condition that could be described as “fit for purpose”. It is hard to envisage any local authority readily accepting responsibility for a highway that does not meet so many of the normally expected standards for such a road in terms of lane and footpath widths, noise, vibration and air quality levels, proximity to houses and so on.

We probably have to accept, therefore, that both ownership and control of SH1 will stay with NZTA. If that is the case, however, we recommend strongly that local communities and the PCC need to have a much stronger say in how the road is controlled and developed. We suggest that this be formalised in a Memorandum of Understanding or some similar agreement.

As far as SH58 is concerned, we suspect that revoking the state highway status on SH58 will also require considerable thought to make it “fit for purpose”. For example, we would normally expect that an arterial road around such a popular inlet would have the facility for people to walk and ride safely off the narrow road. **We would see the construction of a walkway/cycleway next to the road from Pauatahanui to Paremata as being essential before the state highway status is removed.**

The length of SH58 that becomes PCC’s responsibility and how it will be maintained also needs to be given special consideration. Much of Paremata Road is subject to frequent slips and some foreshore erosion, while the Lane’s Flat area is subject to occasional flooding – which will almost certainly become worse and more frequent in future because of the increased run-off from TGM and climate change. **These are not problems that should simply be passed on to PCC ratepayers. Responsibility for their future funding should be agreed upon and clearly spelt out prior to handover.**

(b) Options relating to the future of the existing (older) Paremata Bridge.

Of major relevance to this issue are the “**Commitments to the Local Community**” made during the Environment Court hearing in 2000 by Transit’s Regional State Highway Manager (David Rendall). These included a commitment “**to demolish the existing Paremata Bridge and remove the Clearways through Mana in conjunction with the opening of TGM, and following appropriate public process**” – a commitment which Transit would “**honour whether imposed as conditions of the requirement or not**” and whose funding would be included in “**the cost of construction of the Transmission Gully Project**”.

As far back as October 1996, the then Minister of Transport (Hon Maurice Williamson) described the existing Paremata Bridge as “**nearing the end of its useful life and there is a distinct possibility that, in a moderate earthquake, it would become unusable**”. [Letter dated 16 October 1996 to the Transmission Gully Action Council.] Similarly, the Chairman of Transit NZ (R. Browne) wrote in November 1996 that “**on the opening of the Transmission Gully motorway... it is likely that the current Paremata Inlet Bridge will have reached a condition where demolition will be desirable due to safety issues, excessive maintenance requirements and its increasing seismic vulnerability**”. [Letter dated 7 November 1996 to the Paremata Residents Association.]

Since that time, maintenance to the old bridge has been carried out twice – firstly in the late 1990s and again in 2017. We understand that the work in both cases was primarily to treat rusting

reinforcing steel and crumbling concrete. The latter repairs included installation of sacrificial zinc anodes and were estimated at the time to cost \$850,000. As far as we are aware, no work has been undertaken specifically to address the old bridge's *"increasing seismic vulnerability"* (particularly the likelihood of liquefaction of its approaches), even though the Ohariu fault line goes right under the bridge.

Because it was always intended to remove the old bridge, the new bridge was designed for an extra footpath to be added as soon as TGM is operating – the unused beams extend from the eastern side of the structure at present. Moreover, no effort was made in the design to align the piers on the new bridge with those on the existing bridge – **after all, it was argued, the 8 large rectangular piers under the old bridge would be replaced by just the 5 smaller circular piers under the new bridge as soon as TGM was completed.**

This is a major factor in relation to the impact that the old bridge is having on the future life of the harbour. There is considerable evidence to suggest that the cross-sectional area of the channel entrance – currently determined by the length of the Paremata Bridges, the size of the piers and the presence of other adjacent restrictions affecting tidal flow – has a significant influence on the rate of flushing and infilling of the Pauatahanui Inlet.

This factor has been acknowledged by many experts over the years, including by NZTA in its application for resource consents in 1998 [AEE, Vol.1, p.180] which stated:

"Reclamation of the margins of the channel, to allow construction of earlier bridges, has narrowed the channel with some impact on tidal flows. In the long term this may potentially impact on the flushing of the inlet and may increase the rate of in-filling by sediment. For this reason, no additional narrowing of the channel is proposed for this project".

It was for this reason that NZTA was eventually persuaded to replace the gabion baskets with piles to hold the walkway under the northern end of the bridges, in order to minimize the adverse effect on tidal flows.

The matter was also alluded to in NZTA's AEE [Chapter 32, p. 577] for the Board of Inquiry hearings in 2012 which stated:

"Historically, works at the Harbour mouth such as the construction of the railway line, and reclamations, have affected natural flushing processes meaning sediment is not washed away as quickly as it would have been in an unmodified environment..."

And most recently, the report *"Managing our Estuaries"* released by the Parliamentary Commissioner for the Environment in August 2020, had this to say on the issue:

"Successive road and rail construction, as well as reclamation, has affected the hydrology of both arms of the estuary, resulting in coastal erosion in some places and increased sedimentation in others. For example, bridges at Paremata carrying State Highway 1 and the railway have constrained the tidal flow, reduced ebb-flow variation and probably changed the velocity of flushing." [Page 156, Appendix 4: Te Awarua-o-Porirua Harbour]

The Pauatahanui Inlet has been identified as an "Area of Significant Conservation Value" and previous Regional Coastal Plans made it clear that *"where it is difficult to predict adverse effects with any certainty"* authorities were expected to *"adopt a precautionary approach to resource management decisions"*. In the current situation where the existing evidence suggests that restricting tidal flows at the entrance to the Inlet is likely to be having adverse effects, the

appropriate precautionary approach would seem to be removal of the old bridge - which, in any event, should become unnecessary for some time when TGM is opened.

More details on this issue can be provided if requested.

Many people (particularly those who are unaware of the likely adverse impacts of tidal restrictions) will argue that the bridge should be retained – even if it is no longer used by traffic – because it would retain some value for walking, cycling and perhaps other activities. Some are also afraid that demolition now could have environmental effects or would preclude the possibility of ever replacing the bridge in the future. Others, however, will argue that removal of the old bridge and its large piers should not only improve the flushing ability and extend the useful life of the Inlet, but it would also improve boating access and free up a significant area of land and foreshore on both sides of the channel for other potential uses (extra parking, additional picnic areas, perhaps a jumping platform and slide, etc.).

It is acknowledged that this is currently a very contentious issue both within the community and within this Association. The possibility of reaching any informed consensus would be helped significantly if there were:

- **accepted and conclusive modelling of the effects of the old bridge on the harbour; and**
- **up-to-date information on the structural integrity, earthquake resilience and expected life of the bridge.**

In the absence of such details, the most sensible (and honourable) course of action would seem to be for NZTA to fulfil its previous commitment to demolish the old bridge immediately on completion of Transmission Gully - followed by replacement with a more resilient and environmentally acceptable structure (either another bridge or an extension to the existing one) if and when that is needed. (We suggest that guidelines defining when that time would be reached should be spelt out in a MOU or some similar agreement.)

To enable the commitment to be met, the “*appropriate public process*” (i.e. the obtaining of resource consents, alteration of designations, etc.) would need to be undertaken in time for demolition to take place as soon as Transmission Gully is completed.

(c) *The continuation of four-laning of St Andrews Road between Acheron Road and James Street.*

Obviously, the property owners adjoining St Andrews Road need to be consulted on this.

Our current view is that the stretch of road around Goat Pt (at least between Acheron Road and Pope Street) should be reduced to one lane in each direction and that:

- A footpath should be constructed to provide access for walkers and cyclists to get around the point on the eastern side of the road. This would avoid the inconvenience of needing to cross the road at the Steyne Ave lights or risking crossing without the safety of lights.
- Parking spaces should be provided on the western side of the road around Goat Point to enable passing motorists to enjoy the magnificent views from this location which take in Mana Island, outstanding sunsets, various water-based activities, etc. The opportunity should also be taken to negotiate some arrangement with Z and McDonalds so that the views are not blocked by trees – and perhaps picnic areas are established on the triangular area of land north of McDonalds.

The scenic potential from this stretch of road is immense. Porirua and the Wellington Region need to make the most of it.

(d) Measures (to the extent that they are legally available) to restrict or discourage heavy vehicle movements through the area.

And

(e) Other measures required to ensure an adequate level of service for the traffic volumes and traffic type expected to use the roads concerned.

These paragraphs clearly indicate that the Environment Court (and the parties involved) thought that heavy vehicles should be restricted or discouraged from using the existing road as soon as Transmission Gully is opened. At the same time, the need to cater for the expected traffic volumes and traffic types was recognized. So, what traffic types and volumes should be expected?

We expect that there will still be a significant number of heavy vehicles wanting to use the existing routes, including those making regular deliveries to retail and commercial businesses, undertaking household removals, carrying stock, etc. The route may also still remain attractive to other truckies because of its shorter length of steep gradient and its greater opportunities to obtain food, fuel, etc.

It is desirable that strategies are developed to discourage this latter group. As well as the promised removal of the clearways through Mana, an indicative package of measures prepared by SKM (in consultation with NZTA and PCC) for the Board of Inquiry in 2012 included such things: as changes to the phasing of the lights at Whitford Brown, Mana and Plimmerton; installation of additional sets of lights at Pukerua Bay and Paekakariki; and reduction in speed limits both south and north of Pukerua Bay. Other measures could perhaps include making alternative provision for food and fuel stops on the Transmission Gully route and using road design techniques to make it slower for large trucks to manoeuvre through the coastal communities.

We also expect the existing route to continue being used by a significant amount of tourist traffic. Owners of motor homes and caravans, for instance, will continue to be attracted by the NZMCA facility at Plimmerton and the free overnight parking area at Ngatitōa Domain. Many others (including some tourist coaches) will simply be attracted by the greater scenic values, particularly the wonderful views that the existing route affords.

And, of course, we also expect that a large amount of local traffic will continue to use the existing route, at least in the short-term. This includes not only those travelling to or from the adjoining coastal communities, but we also think that much of the traffic from the Porirua CBD and Titahi Bay areas will continue to use it as at present.

Past forecasts have all suggested that when TGM becomes operable, traffic volumes along Mana Esplanade are likely to fall by between 40 and 50 percent and only two lanes (i.e. one in each direction) will be required. (Figures provided to the Board of Inquiry in 2012, for instance, predicted a fall of 48% from 30,400 to 15,700 vehicles per day in 2026 at the Acheron Road intersection.) If traffic volumes were to reduce by 50 %, then they would need to build again by 100% to reach the previous level. Even if the reduction were much smaller, it is clear that there should be no need for more than 2 lanes for a considerable number of years (if ever).

The SKM report to the Board of Inquiry in 2012 certainly expected that to be the case, describing the anticipated situation after Transmission Gully opens as:

“Kerbside traffic lanes between Acheron Road and Paremata Bridge to be permanently reserved for use by turning vehicles and parking, reducing through traffic to a single lane in each direction.”

The Porirua Growth Strategy 2048, published in February 2019 after consultation with the community, also expected just 2 lanes and included an “*artists impression of Mana Esplanade post revocation*” showing a very wide pedestrian plaza with extensive seating and trees.

It is hard to understand, therefore, why a Technical Report prepared for the Plimmerton Farms Plan Change hearings by Jamie Whittaker (Stantec) in November 2019 includes the following statements:

“The redistribution of district wide traffic flows [after the scheduled opening of Transmission Gully] has the key outcome of ‘freeing up’ significant capacity on the road network in the vicinity of the Plimmerton Farm site, providing opportunities for new trips to benefit from this removal of through-district traffic from the current SH1 alignment. Whilst some revocation works are anticipated along this route following the opening of TG, they have at this stage not been designed or agreed upon between PCC and NZTA, and are also not envisaged as significantly reducing its current traffic carrying capacity since it will need to be relied on for future traffic growth, as well as for resilience purposes.” [Our underlining.]

If we understand this statement correctly, it clearly conflicts with previous expectations and would negate many of the major benefits of building Transmission Gully in the first place.

It is acknowledged that there are strong fears within the community that two lanes will provide insufficient capacity to meet future traffic needs as developments north of Plimmerton take place. It is understood that developments in the Northern Growth Area will take at least 20 years to be completed. By that time, many forecasters are predicting that car use will have reduced significantly, although we cannot be sure of that at this time. In addition, public transport services are expected to develop as demand grows – KiwiRail is already looking at providing for a higher level of service from Plimmerton which should attract more commuter traffic.

NZTA’s position in the past has been to “*recognize that additional traffic capacity is not desirable in the community once TGM is completed*” [ref. Transit evidence to Environment Court in 2000], essentially because it could:

- encourage through traffic to continue using the existing road instead of Transmission Gully;
- encourage local commuters to change their patterns of travel and increase peak flows; and
- induce people to move from public transport into cars.

It is important, therefore, that we create a situation of just two lanes as soon as Transmission Gully opens and that we allow travel patterns and demand to adjust to that capacity. It is also important, however, that planning at this stage should provide for the possibility of future traffic congestion. We suggest that options for increasing the roading capacity through Mana should be being assessed at this stage as well, because of the difficulties that will be encountered in creating a road that meets expected standards and is “fit for purpose” in the future.

(f) Provision of arrangements for cyclists

and

(g) Alteration of footpath widths

and

(h) Removal of traffic lights

There are many ways in which the current corridor could be re-configured once Transmission Gully is opened, and we hope to get some useful feedback from the community on this. The artist's impression provided in the Porirua Growth Strategy is interesting and could possibly be an appropriate concept for a short stretch of Mana Esplanade, but we suspect that most people would probably envisage a quite different treatment for the bulk of the Esplanade. This would perhaps include:

- two traffic lanes (one in each direction) with a slightly wider slip lane between them than at present for vehicles turning into adjacent properties;
- wider (and better formed) footpaths on both sides;
- parking spaces along the kerbs on each side with planter boxes or kerb extensions coming out from the footpath at regular intervals to dissuade other traffic; and
- lanes for cyclists between the parked vehicles and the traffic lanes on each side.

There is also considerable scope for further developing the area just north of the bridge as a "hub" for village activities when the traffic is reduced to two lanes, even if the old bridge were not demolished. The Paremata Boating Club has previously told us of tentative plans to replace the Reid boatsheds possibly with a restaurant on top, while other thoughts have included a jumping/diving platform and slides or swings into the channel. Land freed up on the southern side of the channel could also be used profitably, possibly as parking for events at the Boating Club, for overflow of rail commuters and/or for persons using a new boat launching facility.

We probably wouldn't recommend removing the traffic lights along Mana Esplanade initially as there are still likely to be times of near constant traffic and lights may be needed to provide breaks for residents to access their properties, cars leaving the domain and retail area. We presume there will be a need to change the phasings, however.

There may be pressure to make it possible to extend the capacity of the road in the event of emergencies. We think this should be resisted as we don't believe the most appropriate design for everyday use should be compromised in any way by trying to provide for relatively rare events. We also make the point that where re-construction work is needed on the road, the opportunity to upgrade (or provide for upgrading of) existing trunk underground services should be taken at the same time.

(i) Changes to the operation of the clearways or High Occupancy Vehicle lanes

and

(j) Alteration of arrangements in relation to capacity

and

(k) Any changes to be sought to any NZTA designation in relation to those matters.

Paremata and Plimmerton communities have already had to put up with the health hazards, dangers and inconvenience of clearways for much longer than ever envisaged by the Environment Court. There seems no reason that NZTA should not honour its commitment to remove the clearways immediately TGM is opened. This would presumably require some changes to the designation and other legal measures to remove the clearways and these matters should be addressed well before Transmission Gully is opened.

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