

MEMORANDUM

Date: 27 July 2023

To: Greg Lee

Of: Waka Kotahi New Zealand Transport Authority

SUBJECT: ENV-2023-WLG-000005
SUBMISSION

PAGES 1 + 1

Introduction

Following on from my submission to the Environment Court (EC), and your response by letter dated 9 May 2023, I will outline my issues for discussion with you. This follows the EC conferencing of the submitters who wish to be heard.

I note the judge's comments that I cannot be an expert witness as I am an affected landowner, and thus my issues will be raised in the 274 mediation process. As I replied to the judge, I will, of course, draw on my professional engineering experience in any submission to the Court, as well as my knowledge of the area from living here since 1987.

Below I have attached my submission.

The main points for discussion are:

- The expressway be constructed in accordance with the documents and plans of the Application, and any significant alteration would require a variation, with submitters being able to re-submit on the variation, as well as public engagement about the changes.
- Minor adjustments can be made to the designation corridor to ensure the expressway as proposed can be constructed, with all its ancillary measures, if final design and construction implementation requires this.
- The construction be done in sections, with continuous construction until full completion of each section, and not by the layering of different activities over long lengths.
- Representatives of each local community be included in the Project consultation and information sharing committee, for the section of expressway through that community, and not just a single committee for the whole Project, as has been proposed. This is essentially a committee of local authorities, and not of local community representatives.
- Traffic management on local roads be undertaken in a manner that minimise disruption and delays to local traffic, with reducing local community costs being prioritised ahead of reducing construction and traffic management cost. To internalise to the Project the disbenefits of construction of the longer travel times and route disruptions that the Project generates.

- Specification of construction work times, and the principles to be used when they are exceeded; specification of noise limits, and the principles to be used when they are exceeded; and specification of dust limits, and the principles to be used when they are exceeded. Proposed conditions put this into the hands of nominated experts, without seemingly any method for local people to input information concerning excesses, and feedback about actual effects.
- Minimising lighting along the expressway route, given the semi-rural environment, and the lack of any interchange between Otaki and Levin. Where lighting is used, to use downlights that minimise horizontal spread, and that there is a light transition at each end of lighting sets.
- Given barriers on both sides of the roadway (central and side barriers) that more than the standard (2 m?) offset be required on the road side, to allow for safe pull-overs for break-downs, tyre changing, changing drivers etc. Along many lengths the barrier could be placed further back than the edge of the seal to give a wider stopping area.
- The central barrier to have overlaps that allow turn-arounds, in the event of road blockage because of crashes, breakdowns, slips etc, given the long distances between interchanges.

Given the information I have gleaned from all the Application documents, I will make suggestions on how my concerns could be met.

Submission Issues

Project constructed as per Consent

As commented on in my submission, I have a real concern that the Application proposal will be modified as the project progresses, with changes that are adverse for local communities and the environment. This includes changes in construction methodology and hence its local impacts, as well as because of funding constraints as costs increase over time, or because of an unwillingness to undertake the necessary engagement over the longer term with the broad vision of the Application. Given what has happened with previous expressway construction, cut backs and alterations are likely to be at the expense of local communities, their transport options and impacts on local environments.

I would note that there is an array of measures, mostly environmental and offset, that are outside the proposed designation boundaries shown on the Application plans.

I note your May letter says that the final design would be formally sent to the district and regional councils. This appears to be a notice of the design, without the councils being able to respond and seek alterations. As well, it does not allow for any input from submitters or affected residents.

Construction Methodology

I have downloaded the proposed consent conditions, and read through them, skimming over much, but concentrating on the ones that concern my issues. I understand that management plans will be prepared for different aspects and effects of the Project, but the consent conditions should give reasonably specific principles and guidance as to the objectives of the plans and how they should mitigate effects etc. I note that some guidelines to the content of management plans is given in the attached schedules, but

they are mostly very general, and more objectives than guidelines on content and specific requirements.

Your response letter of May provided some indication of measures to be taken to mitigate dust, noise and traffic.

The list of proposed conditions has a number of categories on noise (DNV 1 3 & 4, for construction noise, and DRN 1 to 6 for operational noise). I could find none on dust, but one on construction traffic management (DCT 1).

Concerning community representation under DCM 1 b), the Community Liaison Group is that required by DCE 2. This includes “the community liaison person of ...DCE 1”, Project Iwi Partners (that are part of the Project team) and just 2 representatives from the district and regional councils, and potentially other community or business groups.

I don't see how 2 people can represent both councils and other groups as well. I also note that this Community Liaison Group only has to meet once every three months.

These are a number of different communities along the expressway route, including Manakau, Kuku, Ohau, Levin (with different communities within the town) and east and north of Levin.

Concerning exceedance of limits of noise and vibration, or visual amenity effects, it does require professional input from experts in the field in question, but there should also be a requirement to take in account the effects as felt by the affected residents. Allowing limits to be exceeded should not just be decided by some appointed expert, who has the final say. The expert opinions should inform both the Project partners and the affected residents, as well as the contractor. The decision should then be made by the affected parties, in a collaborative manner, based on the information provided by the expert(s).

The only applicable condition seems to be the complaints condition of DCE 3. A collaborative approach that allows issues to be resolved in discussions would be better than an after-the-fact formal complaints procedure.

As an expert in my field of engineering, I do not think that decisions should be made by experts, but by the affected parties.

I can not find any construction methodology, in terms of how the expressway and its ancillary works will be programmed, how aspects of the works will be undertaken and in what order, access and transport routes and route type. In my (professional) opinion, a clear construction methodology is as important as design information and drawings.

I accept that the design and drawings are at a concept stage, but I cannot see anything equivalent for the construction methodology.

I was pleased to note your comments under Traffic, but I don't see any of this specifically in the proposed conditions.

The adverse impacts on residents along the length of the expressway depend on the time span of the impacts as well as their intensity. Construction of roads and roading structures, such as bridges, is more efficient if resources are concentrated on a length of road or a structure until it is completed and then the contractor moves on to the next length or structure. Construction by activities over long lengths as layered works, which requires the programming of the different teams involved with different activities, is generally a less efficient construction method. At the same time, this maintains the impacts and disruption on residents beside the expressway over a much

longer period, and with much more uncertainty about when the construction impacts will stop. A construction program that defines construction lengths and structures as distinct elements of the project, with a programmed start and end time, provides more certainty to residents, as well as to the principal in terms of progress and milestones.

Lighting & Barriers

I note from your May letter that full lighting will be at the four interchanges. I accept this is required, but it is the detail around the amount of lighting, its extent and the type of lighting used that I would like more information on. My experience of expressway lighting at interchanges is that it virtually converts night to day, and vehicle lights becoming redundant for driver visibility.

I would suggest that a lesser intensity of lighting, with transitions in intensity at each end, would provide a more comfortable lighting experience for drivers and hence be safer. Intensity is not equivalent to safety in my mind. I find the same at road construction sites, where very bright and rapidly pulsing lighting is hard on the eyes and distracting, rather than informative of road work hazards.

I would be interested to know what lighting is proposed at local road crossings, in particular the Manakau Heights Road bridge.

The lighting should be within the larger context of minimising light pollution, with the roading authority having a goal of minimising light pollution along its highways.

Along the expressway, from Wellington to Otaki, the central barrier is continuous between interchanges, with no turn-around gaps, with one exception. What is meant to happen in an emergency – of flooding, landslide blockage, serious crash etc. – that blocks north or south bound lanes? The expressway interchanges are far apart, and vehicles would be backed up for kilometres, with nowhere to go and no way to turn around. Would people abandon their cars and try walking out to be met by family or friends, and what sort of traffic congestion would that generate at the interchanges? A blockage of the Transmission Gully section by landslides will happen. Most likely in an extreme event, given the engineering of the cut slopes etc, but in this case there are no local roads nearby for people to walk to, where they could be met.

The stopping area from traffic lanes to the side barriers is also very narrow, with very few pull-in areas. There seems to be a standard positioning of the barrier at the edge of the roadway seal, regardless of the area available in terms of land topography.

Wider areas could be made available, at no extra cost to the Project, by siting the barriers in a position that fits in with the landscape, rather than to a standard road width. This would allow for safer pull-overs for break-downs, tyre changing, changing drivers etc. Along most of the expressway, if you have to pullover to change a tyre on the right-hand side, you have to work in the inner traffic lane. If a tyre loses air and starts to disintegrate then you need to stop immediately, especially in modern cars with narrow tyres.

Requested changes to Proposed Consent Conditions

Project constructed as per Consent

Add to DGA1:

- c) If significant changes to the Project are to be made as part of the final design or the proposed construction methodology, then a variation would be required,

with submitters being able to re-submit on the variation, as well as public engagement about the changes.

- d) Minor adjustments to the designation boundaries can be made if this is required to implement the intent of the Project, in accordance with the documents and plans of the Application.

Construction Methodology

Programming

Add a new conditions category of 'Construction Methodology', and one condition to be:

An aim of the construction methodology is to concentrate construction effort along short sections of the expressway length, to minimise the time period of impacts and disruption on any given local community or area. Practical completion of the main roading infrastructure is to be achieved for defined lengths or structures, before moving on to another length or structure. The methodology to define these lengths or structures (bridges etc), and their programming.

Traffic

Schedule 2 - Construction Traffic Management Plan: make the following a)

- a) Traffic management on local roads must be undertaken in a manner that minimise disruption and delays to local traffic, with reducing local community travel costs being prioritised ahead of reducing construction and traffic management cost.

Noise, Vibration & Dust

Change the complaints condition of DCE 3 to a more interactive process that is based on an open engagement with informal as well as formal updates and advisories to residents likely to be affected, and a staged mediation process when there are difficulties in reaching agreements between parties. This should include the sharing of expert views and the results of expert investigations, with residents and local communities, as well as local authorities.

Lighting & Barriers

New conditions, like:

Lighting at interchanges to be kept to the minimum required for visibility at night, as an additional to vehicle headlights, with a light transition at each end, and with a downlighting that minimises horizontal spread. Otherwise, there to be no lighting along the expressway route.

Lighting at local road crossings to be minimal, and in keeping with the general lack of lighting along the local rural roads, with an approach of minimising light pollution.

Side barriers to be set back as far as practical in accord with the roadside topography, to maximise the safe runoff and stopping areas, and not be fixed at the edge of the road formation seal.

The central barrier to have turn-around gaps between interchanges, by overlapping the barrier, at regular intervals along the expressway, of around 2 kilometres, as suits the road geometry and barrier installation.

Gary Williams
FEngNZ

Water & Soil Engineer

ENVIRONMENT COURT SUBMISSION

GENERAL

I have provided feedback and submissions on the Otaki to North of Levin (O2NL) expressway proposals on a number of occasions to Waka Kotahi/NZ Transport Agency (WK/NZTA). I made formal submissions on the corridor options and on the alignments within the chosen corridor – of the present proposal. I have also attended public workshops and presentations, as well as the private meetings we have had as affected property owners. Earlier, I made submissions on the Pekapeka to Otaki (O2PP) expressway proposals of the public consultation process.

In these submissions I raised concerns about the corridor selection process first, and then the local road connections and effects of alignments within the chosen corridor. I was aware that the chosen corridor was the preferred route in 2000, when the rural residential subdivisions south of Manakau were proposed. All the investigations from 2011 and the public engagement in 2018 and onwards was really superfluous, and not a real engagement with the public, given the outcome was the preferred route in 2000.

Our property at 107 South Manakau Road, which also has a frontage on Manakau Heights Road, is affected by the proposals, with a strip of our land to be taken for the expressway.

This submission is in support of the expressway as shown in the application documents, which is a much improved proposal compared to earlier versions of the consultation process. I would not have supported earlier alignments and local road connections and layout proposals.

My main concern is that this proposal, as applied for, will be modified as the project progresses, with changes that are adverse for local communities and the environment.

I would note the meaningful engagement with local iwi that WK/NZTA is demonstrating in the development of the application proposals. Maybe this change in attitude will give rise to a more partnership approach with all affected parties and people in general, with a willingness to listen to and take on board the knowledge and suggestions of people outside of their selected consultants and representatives.

PROPOSAL

There are a number of significant improvements in this application proposal. The general alignment is straighter and smoother, no doubt because of engineering input, local road connectivity is better maintained and there has clearly been more emphasis on environmental enhancements and the mitigation of adverse impacts on people and the environment.

This length of expressway, as I understand the application proposals, is a significant improvement on the PP2O expressway and the local connections or lack of them in what has been constructed, which was significantly changed from what was consulted on. On/Off connections to the local network is maintained at each end (north of Otaki and north of Levin) as well as to SH 57, with a full interchange with roundabouts at

Tararua Road. The dual carriageway has also been extended the full distance to north of Levin.

A shared use path (SUP) is proposed along the full length with good connections to the local roading network, and extensive planting for amenity and environmental purposes is included.

In the Manakau area, a full bridge is included to maintain the connection of Manakau Heights Road to Manakau Village, which was not going to happen in earlier proposals. This connection is what affects our property, but we are pleased that it is going ahead, in this application. At South Manakau Road the expressway will be bridged over. I agree with this alternative, even though the narrowness of the opening may mean some more flooding of the road in intense flood events. A diversion cut of the Manakau Stream will be necessary at the expressway bridge, with the road and stream side-by-side under the bridge.

EFFECTS

I was pleased to hear that traffic noise is being considered at source, in terms of seal surfaces. I do note that noise barriers will be included in some areas, such as the South Manakau Road area, where the expressway is elevated.

I have some concerns about light pollution, given the intensive lighting being used at expressway intersections. I would assume that there would be no additional lighting along the expressway between intersections or on rearranged local roads.

On Manakau Heights Road there is one light at our property, as this was the end of the road, with a turnaround, before further subdivision and connection of the road to the village. This light could be re-positioned at the overbridge.

I would note that this O2NL expressway goes through a densely populated rural residential area, and alongside Levin, with many houses close to the expressway.

The main adverse effects will be during construction, which will have to work around existing roads, homes and natural features over a long period (of 5 or probably more years), while maintaining stormwater drainage ways and runoff management measures.

There will be much machine activity over extended periods, with gravel haul roads and stream crossings as well as accesses to local roads, with truck movements on these local roads. This could generate substantial dust and noise pollution, along with the heavy truck movements, depending on how it is managed and what mitigation measures are used. Maintenance of the local roads affected by heavy vehicle movements of the project must be maintained by the project.

While the Design and Construction report covers these matters in general, with some outlined methodologies, I would like to see the consent authorities (or Environment Court) being specific about mitigation measures, requirements on machine and truck movements, and work times. I would also like to see requirements around informing communities and in particular those people most directly affected by the works as they proceed.

Proposal decision sought

Please state the recommendation or decision you wish the decision maker to make on this proposal (including the general nature of any conditions sought):

DECISIONS

My major concerns are twofold:

- That the proposals as applied for will, for whatever reasons, maybe costs or an unwillingness to undertake the necessary engagement with the broad vision that is required, be cut back and altered in ways that are at the expense of local communities, their transport options and impacts on local environments.
- The disruption over the construction period and maintaining proposed mitigation and engagement requirements over the long time span of the project.

My concerns arise from the PP2O project, where local connections were either not made or were altered to give poorer interconnection with Otaki and Te Horo, despite what was consulted on and the feedback that was given. For example, the northern entry to Otaki was shifted from a slipway onto the existing highway north of Otaki (as was done for the northern connection to Waikanae), to a ramp up to a T-junction that requires a right hand turn across traffic to Otaki, with poor visibility because of the adjacent bridge (with solid sides). The on-ramp north is also in the middle of the bridge, as a T-junction, which is hardly ideal.

The original plans had a roundabout to manage traffic to Otaki from the south and that to Te Horo. Instead, there are sharp right-hand turns across traffic, with minimal turning bays.

The local connection at Pekapeka seemed to go through a number of changes, but without a full interchange there could very easily have been (and still could be) a northbound off way to Te Horo, as well as the on slipway to the north from Waikanae.

While the funds were poured into the expressway as a through highway, there seems to have been a very minimalistic consideration of local transport connections and their convenience and safety.

What I am asking for is, then, that approval for this expressway project includes conditions that require the proposals of the application to be constructed as applied for. And if there is any significant change, their approval would require a recall that allowed submitters to re-submit on the changes, as well as public engagement about the changes.

Minimising the disruption of construction is a much more complex matter, but what I am asking for is that a well-developed methodology is presented to the regulatory authorities (and hence the Environment Court), with examples at a more detailed level than in the application documents. This to include how WK/NZTA will inform local communities and directly affected people throughout the project construction.