

APPENDICES



Appendix A: List of Previous Relevant Reports

"Appendix E to Taylors Road to South of Levin Four Laning Scheme Report: Taylors Road to Ohau River Four Laning Options Report (MCA Report)", MWH, September 2015

"Area Analysis Report", MWH, August 2011

"Corridor Analysis Report", MWH, September 2011

"Levin Bypass Project Feasibility Report", MWH, November 2013

"Otaki to North of Levin Road of National Significance – Investigation of Route Options: Compilation of Summary Reports on Environmental Aspects", MWH, July 2017

"Otaki to north of Levin Scoping Report", MWH, July 2012

"Report 05 – SH1/SH57 Intersection and Arapaepae Curve PFR", MWH, April 2013

"Report 06 – Levin Heavy Vehicle Bypass", MWH, February 2013

"Report 10 – SH57/Queen Street East Intersection", MWH, April 2013

"Report 12 – Four Lane Investigation", MWH, February 2013

"SH1-SH57 Connection Scoping Report", MWH, November 2013

"Taylors Road to South Levin – Indicative Connectivity Strategy", MWH, April 2016

"Taylors Road to South of Levin Four Laning Review and Refinement of Route Option TO17", MWH, February 2016

Appendix B: Briefing Note for First Workshop

STATE HIGHWAY 57 & LEVIN NORTHERN CONNECTION OTAKI TO NORTH OF LEVIN RONS Briefing Note for Site Visit/Workshop, August 3rd 2016

Purpose of day

- Provide update on overall project
- Gain familiarity with project area
- Identify constraints
- Develop initial thinking on early alignments

Background

The NZ Transport Agency (the Transport Agency) has been continuing investigations into the short, medium and long term road transport needs in the area between the Peka Peka to Otaki RoNS project and SH57, east of Levin (Taylors to Ohau).

Prior to undertaking community engagement on these proposals, the Transport Agency has elected to progress investigations for the area to the north of the Taylors to Ohau section.

This will allow community consultation to be undertaken for the full area as a single coordinated engagement process.

The next sections being considered are:

- SH57, between (approximately) Kimberley Road in the south and Tavistock Road in the north.
- A new connection north of Levin, connecting SH57 and SH1

A limited amount of investigation work has already been undertaken in this area, particularly information collection.

To achieve an integrated, comprehensive and robust approach to route development, it is proposed that the investigations and technical expert input should be undertaken in two stages (although further stages may be needed to address matters of detail), as follows:

Stage 1: Initial team workshop involving a site visit, followed by a workshop session to share information, map project constraints and discuss significance and to begin to develop approaches and route preferences that will contribute to further design development of options.

Stage 2: Following a design development phase, a further workshop to collectively review the options, including through MCA processes, as necessary.

The Stage 1 workshop has been arranged for Wednesday 3 August 2016, with Stage 2 to be arranged later, depending on Transport Agency decisions.

Preparation for the Site Visit/Workshop

A wider polygon (area of interest) has been developed as a starting point, within which route options will be investigated. The polygon has been sent under separate cover and is indicative only at this stage.

Can all technical experts please review the area in terms of their expertise. The initial (2011) constraints mapping for the wider area is available on:

<http://www.nzta.govt.nz/assets/projects/otaki-to-north-of-levin/docs/o2l-scoping-report-appendix-a-d.pdf>.

We are asking that technical experts review the initial study area, undertake further investigations as time permits, and be prepared to outline and discuss issues with potential route locations and design. There will be further opportunities to add to this information during the preliminary design of options stage and to incorporate any additional findings into this process and the later evaluation of options.

Please bring to the site visit and workshop any material that you want to talk about (we will have a projector/mapping available).

Preliminary Programme for Site Visit/Workshop

8am – 12:30pm	Travel together north of Otaki departing 80 The Terrace, Wellington at 8am (meet local experts up there at the Adventure Park carpark located at 93 Oxford Street – approx. 945am), view and travel round wider area on public roads only. Travel to Horowhenua Events Centre.
12:30 – 1:00pm	Lunch provided at Horowhenua Events Centre
1:00– 3:00pm	Workshop Session 1:
Introduction – Greg Lee	
Workshop Purpose, scope of this part of project – Sylvia Allan/Phil Peet	
Presentations/discussions on area led by technical experts:	
	<ul style="list-style-type: none">• landscape (Gavin Lister – unable to attend but will provide notes)• ecology (Adam Forbes)• archaeology and cultural values (Daniel Parker – Morrie unable to attend but will provide notes)• geology (Chris Robson)• planning framework (Chris Scrafton/Sylvia Allan/Caroline Horrox)• agricultural/horticultural land use (Lachie Grant)• Property (TPG TBC)• Traffic, etc (Jamie Povall)
3.00 - 3.10pm	Afternoon tea
3.10 – 3.45pm	Workshop Session 2:
	General discussion:
	<ul style="list-style-type: none">• Identify principles for route development• Previously identified routes• No-go areas• Extent of connectivity with local road system• Possible mitigation in general terms, etc.
	Wrap up, next steps, likely time-frame.

Final Points

The current stage of work is confidential, and needs to be kept so.

Safety is paramount and for that reason we will not be able to alight from the bus alongside SH1 or SH57. In other places we will be able to get out, so please wear suitable footwear and clothing.

Any questions, please get in touch with Phil on 027-211-8246, or Jon England on 027-499-4109.

See you on Wednesday.

Phil Peet

1 August 2016

Appendix C: Notes from First Workshop – 3rd August 2016

Meeting Name	Levin Northern Corridor Connection Site Visit and First Workshop		
Meeting Venue	Horowhenua Events Centre		
Date Of Meeting	Wednesday 3 rd August	Time Of Meeting	1:00pm-3:00pm (followed on from site visit in the morning)

Attendees	Initials	
Greg Lee	GL	NZ Transport Agency
Caroline Horrox	CH	NZ Transport Agency
Jasvinder Madhar	JM	NZ Transport Agency
Phil Peet	PP	MWH
Jamie Povall	JP	MWH
Chris Robson	CR	MWH
Chris Scrafton	CS	MWH
Marten Oppenhuis	MO	MWH
David Allen	DA	Buddle Findlay
Thaddeus Ryan	TR	Buddle Findlay
Lachie Grant	LG	Landvision
Sylvia Allan	SA	Allan Planning and Research
Daniel Parker	DP	Insite Archaeology
Adam Forbes	AF	Forbes Ecology
Kevin Peel	KP	Horowhenua District Council
Daniel Haigh	DH	Horowhenua District Council
David McCorkindale	DM	Horowhenua District Council
John Foxall	JF	Horizons
Kris Connell	KC	The Property Group

Apologies	Initials	
Morrie Love	ML	Raukura Consultants
Gavin Lister	GLister	Isthmus

Agenda Item	Led By	Discussion Points
Introduction	GL	<ul style="list-style-type: none"> The NZ Transport Agency (the Transport Agency) has been continuing investigations into the short, medium and long term road transport needs in the Otaki to North of Levin area (between Taylors Road and north of Levin). These investigations have identified options for a long term 4 lane solution between Taylors Road and Ohau / Levin. Prior to undertaking further community engagement on these proposals, the Transport Agency has elected to also undertake investigations of long term solutions from Levin to north of Levin so that community consultation can be undertaken in respect of the potential long term solution for SH1 through Horowhenua. The enlarged focus has been prompted by recent transport and growth trends, the new certainty about major infrastructure development (expressway from Wellington to north of Otaki (Taylors Road) open by 2021 and replacement Whirokino and Manawatu Bridge by 2019 (opening up SH1 to all heavy freight vehicles). Transport improvements need to be integrated with planning activity by Horowhenua District Council notably it's town centre study.

Agenda Item	Led By	Discussion Points
Workshop purpose/scope of the project	PP / SA	<ul style="list-style-type: none"> The purpose of this workshop session is to share information, map project constraints and discuss significance and to begin to develop approaches and route preferences that will contribute to further design development of options from Ohau to north of Levin. (See pre-circulated briefing note and "area of interest" map)
Technical Discussions:		
<ul style="list-style-type: none"> District Plan matters 	DM	<ul style="list-style-type: none"> Historically Levin has been an area zoned residential surrounded by rural. The District Plan review, made operative over the last 3 years has introduced zone changes. Most significant is the intro of the deferred residential zone which was identified in the 2008 growth strategy. An area to the east of Levin is earmarked for peri-urban development (minimum lot size of 2,000m² if reticulated, or 5,000m² if un-reticulated). Development in this area can be enabled by way of Council resolution. Have been some development in this deferred growth area but anticipate this to accelerate as number of parties are discussing opportunities with the Council. Trend of bigger scale development emerging (both subdivision and infill) – now seeing some developments with 50-70 dwellings seeking consent. Number of cul-de-sac developments have occurred in the general area. Overall no areas protected from development by the district plan within the area of interest. Some localised flooding issues on northern end of SH57 would need to be resolved but this should not be problematic. Also issue of high class soils and landscape (see below). Structure plan identifies approximately 100m wide transport corridor adjacent to SH57. There has been pressure to provide a service area in transport corridor at Queen Street. West of SH57 and south of Levin – potential industrial development – plan review process has enabled it – structure plan and design guide for light industry – Tauarua Road. Versatile (class 1 and 2 soils) to north west of SH57. District Plan seeks to retain productive use. Anticipated future urban growth to the north of Levin – residential boundary has expanded north – develop to 350m². Wide range of interest in commercial community regarding the project, in particular whether the State Highway will continue through the town. The Town Centre planning study has had good levels of community engagement and interest. Will be reported back to the Transport Agency in due course. Work is being undertaken to develop a Town Centre Strategy. The Strategy to date is based on the State Highway passing through the town centre. The Strategy has a 50 year planning horizon. Future growth in Levin is anticipated to be a combination of greenfield development and infill development.
<ul style="list-style-type: none"> Landscape 	GLister (notes)	<ul style="list-style-type: none"> Described as a working rural environment with consistently average landscape values throughout the area of interest. Views available tend to be close views.

Agenda Item	Led By	Discussion Points
		<ul style="list-style-type: none"> • Landscape absorption capacity north of Levin is average but east of SH57 it is good. • Specific consideration will need to be given to the visual/landscape effects of a potential railway crossing. • Most visual effects are likely to be on existing dwellings, as there are no outstanding landscapes or natural features.
<ul style="list-style-type: none"> • Ecology 	AF	<ul style="list-style-type: none"> • South end of study area pretty straight forward. • There are few remnant bush fragments left in this area. • A couple of bush fragments to the east of Levin - one recognised by DOC – snail population (1995 report) – could be similar values in nearby bush area. This adjacent area was considered for protection in the structure plan as having value. Landowners pushed to have protection removed and were successful. • All native vegetation has had a “hard life”, meaning that remaining bush fragments have been whittled away over time. • Would prefer to not have a State Highway between the two bush areas east of Levin. • North and out of study area, there is a swamp system. Heatherlea East Road acts as a boundary – to the north of which there are numerous drainages – potential presence of wetlands. • Areas around Avenue North Road have some vegetation values. • Notable wetlands and species outside of study area near Lea Grove – north of SH1. • Lots of poorly drained soils and gully systems.
<ul style="list-style-type: none"> • Archaeology / Cultural 	DP	<ul style="list-style-type: none"> • Muhunoa 1B1B block is Maori land. Will not be affected if TO17 is preferred south of Levin. [Post meeting note: NZTA has not yet made a decision on preferred option until after this investigation has been undertaken and until after consultation has been undertaken and considered.] • Kereru Marae is outside area. • No other maori land other than to the north east (outside of study area) • Roslyn Road is boundary (Raukawa to the north of Roslyn Road Muoupoko to the south). Will be some cross over. • Prouse homestead, east of Levin is the oldest building and of significance – probably archaeological site (pre-1900) of most significance in the study area. • Numerous sporadic birding camps in Pre-European forest – none of which would be a fatal flaw if affected. • Numerous clearings adjacent to watercourses. • Much better info south of Roslyn Rd as a result of land claims. • Ideal alignment would be to swing between Heatherlea East Road and the northern urban edge of Levin. • A lot of uncertainty in the survey information to date. • Remains (potentially human) in the proximity of Roslyn Rd (discovered during a swimming pool excavation).
<ul style="list-style-type: none"> • Geology 	CR	<ul style="list-style-type: none"> • Ground risk – couldn’t see any fatal flaws of any alignment that can’t be designed out • Getting up and over the rail could be the only tricky issue.

Agenda Item	Led By	Discussion Points
		<ul style="list-style-type: none"> • Terraces made of different materials – will perform differently. • Potential for compressible soils - likely to be marine sands. Unlikely to be able to open up large areas of earthworks at one time. • May want to consider gentle slopes for earthworks. • Will be a need for imported materials. There are nearby quarries. • Seismic risk – will have to be captured and controlled around design. No known fault lines. • KP and DH noted that material alongside SH57 was generally very good.
<ul style="list-style-type: none"> • Property 	KC	<ul style="list-style-type: none"> • Will be looking at covenants • Haven't identified any Maori land yet – study area seems to have none but this needs to be confirmed. • Some large parcels – potential for multiple ownership e.g. trusts... - could be some complications. • Need to reduce area of interest for property team. – next stage they will be able to develop property “constraints map”
<ul style="list-style-type: none"> • Stormwater 	JF	<ul style="list-style-type: none"> • Big issues around Stormwater management and sedimentation. • Fish passage is important.
<ul style="list-style-type: none"> • Soils 	LG	<ul style="list-style-type: none"> • The elite soils occur on LUC classes I and II. This makes up about 70% of the study area. The rest is a combination of class III and VI land. • The underlying geology is gravels, fine alluvium over gravels or loess over gravels on the flats. The steeper country is patchy loess over weakly consolidated sandstone. • The unconsolidated or weakly consolidated sandstone material can handle a steep batter but not a high-steep batter. Benching would probably be required at about 3-4 metres in height. • It will be unavoidable to avoid high quality LUC classes (ie classes I, II and III land) from any proposed road in the study area. • The biggest issue in the study area will be sediment control. The Levin and the Kiwitea soils are easily entrained in flowing water due to their textural composition and relatively small ped size. • Landuse is a combination of dairying (revised estimate of 3 farms), dry stock farming, horticulture, gardening and lifestyle blocks.
<ul style="list-style-type: none"> • Local Roads 	KP	<ul style="list-style-type: none"> • Connectivity on and off the State Highway as well as across it is important. • Need to look at bridges etc. • Walking and cycling strategy group has gained momentum. – limestone cyclepath along Queens St. Council want to look at extending this along Gladstone Street to Kimberley Reserve and to make a loop – still in early conception stages. – this will be bisected by the road. • Interested to see what happens to Levin Town Centre.
<ul style="list-style-type: none"> • Traffic 	JP	<ul style="list-style-type: none"> • Need to consider direct access from growth areas – industrial area on Tararua Road & deferred residential area and the town centre (Queens Street). • Severance is going to be a major consideration

Agenda Item	Led By	Discussion Points
		<ul style="list-style-type: none"> • If Northern Connection is progressed would initially be two lane, but would need potential to have passing lanes or full 4L upgrade in future • If two lane solution preferred for SH57 (or a parallel route) – need to consider passing opportunities. • If online – temporary traffic management could be a significant disruption. • Issue of connecting improvement sections of road with older lower quality infrastructure.
Closing Comments		
<ul style="list-style-type: none"> • Overall 	PP / SA	<ul style="list-style-type: none"> • No red flags have emerged from discussions. • Need to look closer at property details from here on. • All agreed that the study area can be confirmed as up to be South of Heatherlea East Road – Any route north of Heatherlea East Road would be longer, steeper, more expensive and potentially of more ecological value. • Also south of Roslyn Road, study area would be only on the eastern side of SH57 as western side is developed or zoned for development.