

Before the Independent Hearings Panel
at Timaru

under: the Resource Management Act 1991

in the matter of: Submissions and further submissions in relation to
Timaru Proposed District Plan – Hearing E

and: **Fonterra Limited**
Submitter 165

Statement of evidence of Susannah Vrena Tait

Dated: 23 January 2025

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STATEMENT OF EVIDENCE OF SUSANNAH VRENA TAIT

1. INTRODUCTION

- 1.1 My name is Susannah Vrena Tait.
- 1.2 I am a Partner at Planz Consultants Limited. I hold Bachelor of Science and Master of Applied Science degrees. I am a full Member of the New Zealand Planning Institute and a certified commissioner under the Making Good Decisions programme. I have been employed in the practice of planning and resource management for over 20 years, both in New Zealand and Australia. A summary of my qualifications and relevant experience is contained in Appendix A to my Hearing A and Hearing B statements of evidence (dated 22 April 2024 and 5 July 2024 respectively).
- 1.3 I assisted with the preparation of the submissions and further submissions made by Fonterra Limited ("**Fonterra**") (Submitter 165) on the Timaru Proposed District Plan ("**PDP**"). I am authorised by Fonterra to provide evidence on its behalf.

2. CODE OF CONDUCT

- 2.1. In preparing my evidence I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the Hearings Panel. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

3. SCOPE OF EVIDENCE

- 3.1 In preparing my evidence I have read:
- i. The relevant s32 Evaluation Reports.
 - ii. The 'Section 42A Report: Energy and Infrastructure, Stormwater and Transport' prepared on behalf of the Timaru District Council ("**Council**") by Mr Andrew Willis.
 - iii. The 'Section 42A Report: Subdivision and Development Areas' prepared on behalf of the Council by Mr Nick Boyes.
 - iv. The 'Section 42A Report: Sites and Areas of Significance to Māori and Māori Purpose Zone' prepared on behalf of the Council by Ms Liz White.
 - v. The 'Section 42A Report: Historic Heritage and Notable Trees' prepared on behalf of the Council by Mr Andrew MacLennan.
- 3.2 In my evidence, I will refer to the s42A report authors as '**the reporting officer**'.

- 3.3 I have also read, and I am reliant on, the evidence of Ms Suzanne O'Rourke (corporate), and the evidence prepared by Mr Dave Smith (transport planning) as part of the Hearing B stream on behalf of Fonterra (**Appendix A**).
- 3.4 In my evidence, I set out:
- a. A summary of relevant background information (**Section 4**).
 - b. Responses to specific Fonterra submissions on the Energy and Infrastructure ("**EI**"), Stormwater ("**SW**") and Transport ("**TRAN**") chapters (**Section 5**).
 - c. Responses to specific Fonterra submissions on the Subdivision ("**SUB**") chapter (**Section 6**).
 - d. Responses to specific Fonterra submissions on the Sites and Areas of Significance to Māori ("**SASM**") chapter (**Section 7**).
 - e. Responses to specific Fonterra submissions on the Historic Heritage ("**HH**") chapter (**Section 8**).
- 3.5 For ease of reference, the reporting officer's recommended amendments to provisions are shown in purple underline and ~~purple strikethrough~~, and my recommended amendments to provisions are shown in red underline and ~~red strikethrough~~.

4 BACKGROUND

- 4.1 To assist the Panel, I will briefly set out what Fonterra sought during the Hearing B stream, the provisions agreed with Mr MacLennan, and how the outcome of that hearing has a bearing on the provisions in the remainder of the PDP.
- 4.2 Fonterra are seeking that a Special Purpose Zone ("**SPZ**") (specifically the Clandeboye Dairy Manufacturing Zone) apply to their manufacturing site at Clandeboye (at the intersection of Canal, Milford-Clandeboye and Rolleston Roads). As set out in my Hearing B evidence, a SPZ better provides for the nature, scale and function of the Clandeboye site, reduces the regulatory burden on the site's day-to-day operations, and supports development of dairy processing activities when consent is required.
- 4.3 Following the completion of Hearing B, Mr MacLennan and I met on several occasions to discuss the provisions that would apply to the Clandeboye site. in a Joint Witness Statement¹, Mr MacLennan and I agreed on the provisions that should apply to the site, but not the planning mechanism by which they should be applied. Mr MacLennan supports a General Industrial Zone with a precinct overlay; whereas I consider that a SPZ is the appropriate planning mechanism.

¹ Joint Witness Statement (Planning) dated 2 October 2024
https://www.timaru.govt.nz/_data/assets/pdf_file/0003/938262/Hearing-B-TDC-Memo-of-counsel-Fonterra-JWS-4-Oct-2024.pdf

- 4.4 As the Panel are still to make a recommendation on the appropriate planning mechanism for managing the Clandeboye site, any reference to 'zone' in reports and proceedings relating to district-wide matters, can be read interchangeably as 'precinct'.

5 ENERGY AND INFRASTRUCTURE, STORMWATER AND TRANSPORT

Energy and Infrastructure

- 5.1 Fonterra made three submissions² and four further submissions³ on the EI chapter (and related definitions) of the PDP.
- 5.2 In response to submissions, the reporting officer⁴ has recommended that amendments be made to all the provisions that Fonterra submitted / further submitted on. Having reviewed the amendments, I support the recommendations of the reporting officer.

Stormwater

- 5.3 Fonterra made two submissions⁵ on the SW chapter of the PDP supporting exemptions from the rule requirements for activities that hold stormwater discharge consent from the Canterbury Regional Council. The reporting officer⁶ has recommended that these submissions be accepted. However, in my opinion, the changes recommended by the reporting officer to SW-R4 are not clear. To remove confusion, I recommend that reference to the Clandeboye site be removed from the left column, as the site is not reticulated and would not be captured by the rule anyway.

Transport

- 5.3.1 Fonterra⁷ made submissions seeking that TRAN-O1 and TRAN-P7 be retained as notified. The reporting officer⁸ has recommended that TRAN-O1 be amended to reflect other submissions and that TRAN-P7 be retained as notified. I support the reporting officer's recommendations.
- 5.3.2 Fonterra⁹ sought changes to TRAN-P8 to limit the requirement for landscaping in carparking areas. The reporting officer¹⁰ has recommended that the

² Submissions 165.17, 165.34 and 165.35

³ Further submissions 165.8FS, 165.41FS, 165.42FS and 165.47FS

⁴ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraphs 6.10.19, 6.20.12, 6.22.8, 6.25.13, 6.26.24 and 6.30.7

⁵ Submissions 165.36 and 16.37

⁶ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraph 6.63.6

⁷ Submissions 165.38 and 165.39

⁸ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraph 6.69.8 and Appendix B

⁹ Submission 165.40

¹⁰ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraph 6.75.7

submission be accepted in part. Having regard to the reporting officer's recommendation with respect to TRAN-S1 (discussed below), I support the reporting officer's recommended amendment to TRAN-P8.

- 5.3.3 To reflect the nature, scale and function of the Clandeboye site, Fonterra¹¹ sought amendments to TRAN-S1 (landscaping), TRAN-S5 (cycle parking), TRAN-S7 (loading) and TRAN-S20 (trip generation). The reporting officer¹², with advice from Mr Collins, has recommended that Fonterra's submissions on TRAN-S1 and TRAN-S5 be accepted, and Fonterra's submissions on TRAN-S7 and TRAN-S20 be rejected.
- 5.3.4 I support the recommendations of the reporting officer to accept Fonterra's submissions on TRAN-S1 and TRAN-S5, specifically to exempt the Clandeboye site from the standards.
- 5.3.5 I disagree with the recommendation of the reporting officer to reject Fonterra's submission on TRAN-S7. The nature and function of the Clandeboye site mean that the loading spaces are closely integrated with the site's circulation and not marked (as there is no need for such an approach).
- 5.3.6 I consider that including the Clandeboye site in TRAN-S7 (and consequently TRAN-S8) would create a burdensome consenting trigger for smaller projects at the site (that are anticipated by the proposed zone provisions). As explained by Ms O'Rourke, the rule requirement to provide for specific loading at the site is not practicable for Fonterra. Loading and logistics management form a core part of Fonterra's operations, receiving milk and supplies/equipment to site and then delivering milk powder, cheese and other dairy products to supply lines.¹³
- 5.3.7 In the event that a significant project is proposed (that would substantially change the layout of the site), resource consent as a discretionary activity will be required and will allow Council with the scope to consider the transport aspects of the Clandeboye site (including loading/circulation). As such, I consider that the Clandeboye site should be exempt from TRAN-S7 (and consequently TRAN-S8).
- 5.3.8 I disagree with the recommendation of the reporting officer to reject Fonterra's submission on TRAN-S20. At the time of submitting, Fonterra's position was to exclude the Clandeboye site from TRAN-S20 on the basis that a specific trip generation rule would be included in the proposed SPZ. To confirm the most appropriate approach to managing traffic generated at the Clandeboye site, Mr Dave Smith (Abley) was engaged by Fonterra to provide evidence as part of the Hearing B process. Having considered the specific operational characteristics of the Clandeboye site and the capacity of the surrounding road network, he concluded that the thresholds for 'mixed use and other activities' in TRAN-S20 are appropriate to consider the trip generating effects of the

¹¹ Submissions 165.41, 165.42, 165.43 and 165.44

¹² Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraphs 6.84.7, 6.86.3, 6.86.4, 6.87.3 and 6.95.7

¹³ Evidence of Ms Suzanne O'Rourke (Hearing E) dated 21 January 2025 at [18]-[20].

Clandeboyne site. I have met with Mr Collins to discuss the evidence of Mr Smith and he has verbally agreed that Mr Smith's recommendation is appropriate.

- 5.3.9 As such, I consider that a simple amendment can be made to Table 21 in TRAN-S20 as follows:

TRAN-S20	High Trip Generating Activities				
All zones	Table 21 – High traffic generating activities				
	Activity	Basic ITA Required		Full ITA Required	
	...				
	<i>Mixed Use or other activities not listed above, <u>including all activities within the Clandeboyne Dairy Manufacturing Zone</u></i>	50	<i>Vehicle movements / peak hour</i>	120	<i>Vehicle movements / peak hour</i>
		250	<i>Vehicle movements / peak day</i>	1000	<i>Vehicle movements / peak day</i>
		<i>whichever is the greatest of above</i>		<i>whichever is the greatest of above</i>	

- 5.3.10 In the event that neither a SPZ or precinct are adopted by the Panel for the Clandeboyne site, I consider that the site can still be exempt / managed in TRAN-S1, TRAN-S5, TRAN-S7 and TRAN-S20 (by identification with legal description or address), as the logic for an alternative treatment of the site is not contingent on its zoning, but rather its nature, function and location.
- 5.3.11 In further submissions, Fonterra¹⁴ opposed a Council submission¹⁵ seeking that the pavement impact of heavy vehicles be considered. The reporting officer¹⁶ has recommended that a new rule be adopted that will have the overall effect of enabling the Council to gather financial contributions if an activity generates heavy vehicles movements that will impact pavement life.
- 5.3.12 Firstly, given the substantial implications on growth in the District, I question the Council's approach of incorporating this rule into the PDP through the submission process with little consultation with the community. Secondly, given the rule is reliant on APP7 – Financial Contribution there is little certainty of costs for developers/road users (compared to contributions levied through a sophisticated Development Contribution Policy, like those used in other parts of the country).
- 5.3.13 Notwithstanding my comments in paragraph 5.4.13, I have discussed the rule with Mr Collins, and I understand that the intention is for the rule to apply to all local/collector/principal roads in rural areas and local/collector roads in

¹⁴ Further submission 165.3FS

¹⁵ Submission 42.28

¹⁶ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraphs 6.95.8 – 6.95.11

urban areas. The Clandeboye site is an anomaly, in that, it is an urban zone in a rural location with an adjoining principal road. To the extent that the rule affects the Clandeboye site, I consider that heavy vehicle movements generated by the site on Milford-Clandeboye Road and Rolleston Road should be exempt from the rule as principal roads serving urban zones are not intended to be caught by this rule.

5.3.14 As such, I consider that the rule should be amended as follows:

TRAN-RX Heavy vehicle trip generation activities

All Zones

Activity status: Restricted Discretionary

...

Notes:

1. This rule does not apply to heavy vehicle movements generated on State Highways, Regional Arterials, District Arterials, ~~or~~ Principal Roads that do not share a boundary with a Rural zone, or to heavy vehicle movements on Milford-Clandeboye Road and Rolleston Road that enter/exit the Clandeboye Dairy Manufacturing Zone.

5.3.15 Lastly, Fonterra¹⁷ sought to amend the roading hierarchy assigned to Kotuku Place and the adjoining section of Canal Road (where the Regional Arterial Road status would continue on Canal Road, rather than Kotuku Place). The reporting officer¹⁸ has recommended that this submission be accepted. I support this recommendation.

6 SUBDIVISION

6.1 Fonterra¹⁹ made submissions and further submissions on SUB-O1 and SUB-O3, a new objective proposed by 'The Telcos', SUB-P3, SUB-P5, SUB-P14 and SUB-P15 which all sought (in essence) better recognition of reverse sensitivity effects, including on rural industry. The reporting officer²⁰ has recommended a range of amendments to these provisions, which variably accept, accept in part, or reject the submissions and further submissions by Fonterra.

6.2 Generally speaking, I support the reporting officer's overall approach to reverse sensitivity across the suite of SUB objectives and policies. More specifically, I support the reporting officer's recommendation to accept Fonterra's submission on SUB-O1 to specifically make reference to 'use' and 'reverse sensitivity

¹⁷ Submission 165.6

¹⁸ Section 42A Report: Energy and Infrastructure, Stormwater and Transport, paragraph 6.96.7

¹⁹ Submissions 165.82, 165.83, 165.84, 165.85, 165.86, 165.145 and further submissions 165.29FS, 165.46FS, 165.48FS, 165.49FS and 165.51FS

²⁰ Section 42A Report: Subdivision and Development Areas, paragraphs 7.2.31, 7.2.32, 7.2.34 and 7.2.35

effects' in SUB-O1.10. I also agree with the reporting officer's approach to SUB-O3 and SUB-P5 to replicate the approach adopted by Mr MacLennan (for the GRUZ) to primarily seek to avoid reverse sensitivity effects in the rural environment, as well as specifically recognise industrial / rural industry activities at a policy level. I agree with the reporting officer that further recognition of reverse sensitivity effects is not warranted in light of the amendments to SUB-O1.10, SUB-O3 and SUB-P5.

- 6.3 Lastly, the reporting officer²¹ recommends the retention of the 40ha minimum lot size in the GRUZ (SUB-S1). I support this recommendation as it will minimise the loss of highly productive land, the fragmentation of land and the potential for reverse sensitivity effects.

7 SITES AND AREAS OF SIGNIFICANCE TO MĀORI

- 7.1 Fonterra²² sought to exclude the Clandeboye site from SASM-R1 due to the heavily modified nature of the site (and the high likelihood that any potential cultural values within the site are already lost or compromised). Although, the reporting officer²³ has recommended that the Fonterra submission be rejected, I support the recommendations by the reporting officer to amend the rule so that it will only apply within the General Rural Zone and Rural Lifestyle Zone (and therefore will not apply to the Clandeboye site). I consider that the proposed change takes a practical approach to developing urban zoned sites which have been heavily modified or are anticipated to be heavily modified.

8 HISTORIC HERITAGE

- 8.1 Fonterra²⁴ sought a suite of changes to the HH provisions to better enable the maintenance and adaptive reuse (and therefore conservation) of heritage items (specifically Category B heritage items). With the exception of changes to accommodate official signs²⁵, the reporting officer²⁶ has recommended that the amendments sought by Fonterra be rejected.
- 8.2 Having considered the policy direction of the Canterbury Regional Policy Statement ("**CRPS**"), I consider that the approach adopted by the Council overlooks the enabling provisions of the CRPS²⁷ that support conservation, including adaptive reuse of heritage items.

²¹ Section 42A Report: Subdivision and Development Areas, paragraph 7.5.1

²² Submission 165.79

²³ Section 42A Report: Sites and Areas of Significance to Māori and Māori Purpose Zone, paragraph 8.9.22

²⁴ Submissions 165.23, 165.64, 165.66, 165.68, 165.69, 165.70, 165.71, 165.72, 165.73, 165.74, 165.75, 165.78

²⁵ Section 42A Report: Historic Heritage and Notable Trees, paragraphs 6.14.11 – 6.4.15

²⁶ Section 42A Report: Historic Heritage and Notable Trees, section 6.2

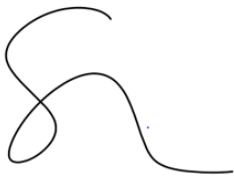
²⁷ Canterbury Regional Policy Statement, Policy 13.3.4: 3.1 *Appropriate management of historic buildings: Recognise and provide for the social, economic and cultural well-being of people and communities by enabling appropriate repair, rebuilding, upgrading, seismic strengthening and adaptive re-use of historic buildings and their surrounds in a manner that is sensitive to their historic values.*

8.3 By way of comparison, I have reviewed the 2nd generation Christchurch, Selwyn and Waimakariri District Plans and consider that the Council are consistently adopting a more stringent activity status than their neighbours with respect to activities relating to heritage items. This will increase the consenting burden and costs within the District and may deter conservation efforts including adaptive reuse. A comparison of heritage rules²⁸ is contained in **Appendix B**.

8.4 On this basis, I recommend the following activity status amendments:

Rule:	Activity:	Notified as:	Amended to:
HH-R3 and HH-R6	Signage	RDA – DIS	CON
HH-R10	Subdivision	DIS	RDA
HH-R4	Minor works, including earthworks	RDA	PER (with requirements)
HH-R5	Earthquake strengthening	RDA	CON
HH-R7	Alterations or additions	DIS	RDA
HH-R8	Relocation within setting	DIS	RDA

8.5 I consider that downgrading the activity status (with suitable rule requirements, matters of control or matters of discretion) for the listed activities finds a better balance between protecting historic heritage values from inappropriate subdivision, development and use, while enabling conservation works and activities that enable adaptive reuse.



Susannah Vrena Tait

23 January 2025

²⁸ This is an overview of the rules and does not attempt to capture the nuance of each individual rule, including the permitted activity rule requirements.

APPENDIX A

Evidence of Mr Dave Smith (for Hearing B)

Before the Independent Hearings Panel
at Timaru

under: the Resource Management Act 1991

in the matter of: Submissions and further submissions in relation to
Timaru Proposed District Plan – Hearing B

and: **Fonterra Limited**
Submitter 165

Statement of evidence of David John Robert Smith (Traffic)

Dated: 5 July 2024

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STATEMENT OF EVIDENCE OF DAVID JOHN ROBERT SMITH

INTRODUCTION

- 1 My full name is David (Dave) John Robert Smith.
- 2 I hold a Bachelor of Technology (with Honours) in Industrial Operations Research and Master of Philosophy in Operations Research from Massey University. I am a Chartered Member of the Institute of Logistics and Transport (CMILT), a member of Engineering New Zealand (MEngNZ) and of the NZ Modelling User Group sub-group of ENZ. I have been appointed to the NZ Transport Agency Independent Professional Advisors panel for Transportation Modelling. I am also certified as a Hearings Commissioner having completed the Making Good Decisions course in 2019.
- 3 I hold the position of Technical Director of Transportation Planning at Abley. I have been in this position since 2018 and have been at Abley for nine years. I lead a range of development and transportation planning projects for public and private sector clients.
- 4 My previous work experience includes 24 years of transportation planning and engineering experience. I have managed and led numerous projects related to transportation planning, transportation research and Resource Management Act 1991 (*RMA*) related matters for public and private sector clients. As an expert witness I have recently been engaged by Foodstuffs South Island Limited, Auckland Council, Selwyn District Council, Queenstown-Lakes District Council, Fulton Hogan, Ports of Auckland and Fonterra Limited.
- 5 Although this is a council hearing, I confirm I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the hearing committee. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

SCOPE OF EVIDENCE

- 6 I have been asked by Fonterra to prepare this brief of evidence to assist the Hearing Panel in relation to traffic matters.
- 7 In preparing my evidence I have reviewed:
 - 7.1 Fonterra's submission on the Timaru Proposed District Plan (*PDP*) dated 15 December 2022;
 - 7.2 Provision TRAN-S20 in the PDP and related matters in the area-wide Transport chapter; and

- 7.3 Various information provided by Fonterra in relation to traffic, including some assessment work done by Beca Limited in 23 June 2023.
- 8 The scope of my evidence is limited to establishing a suitable traffic generation threshold for the Clandeboye Dairy Manufacturing site (*the Site*), which will inform a trip generation standard applying to the Site. My evidence provides:
- 8.1 a brief outline of the existing traffic environment around the site with comment on the capacity of the existing roading network;
- 8.2 the basis of the threshold for assessing traffic effects set out in proposed rule TRAN-S20 and how that rule will work in practice; and
- 8.3 recommendations towards a suitable threshold for assessing the traffic effects of future development applications at the Clandeboye site.

EXISTING TRAFFIC ENVIRONMENT

- 9 The Site operated by Fonterra is situated at the intersection of Rolleston Road and Milford Clandeboye Road, approximately 30km northeast of Timaru and 56km southwest of Ashburton. The Site is situated in the Industrial H zone under the current Timaru Operative District Plan surrounded by rural zoned land (R1 and R2).
- 10 The notified zoning of the Site is General Industrial Zone under the PDP. The overall context of the environment is rural with farming activities on neighbouring properties and the closest urban centre, Temuka being located 13km to the southwest.
- 11 The daily traffic generated by the Site has been surveyed over a continuous seven-day period from 4th-10th November 2019 by Fonterra (the *2019 Data*). The Site has advised that the current traffic levels are very similar to 2019 traffic activity levels based on the capacity and operations of the Site. I also understand that the data was captured during peak milk production season so is representative of peak traffic activity at the Site.
- 12 A summary of the traffic data which comes from the earlier assessment information undertaken by Beca is included in **Attachment One**. I have analysed the 2019 Data to determine the peak daily, average daily, peak hourly and average hourly two-way traffic volumes generated by the site. These are as follows:
- 12.1 Peak daily traffic volume is 2,156 vehicle movements per day observed on Tuesday 5th November 2019;
- 12.2 Average daily traffic volume is 1,828 vehicle movements per day which is the seven-day average over the survey period;

- 12.3 Peak hourly traffic volume is 420 vehicle movements per hour which comprises 360 vehicles arriving for the day shift (and departing at the end of the day shift) on Wednesday 5th November 2019, coupled with approximately 60 milk tanker and service vehicle movements per hour; and
- 12.4 Average hourly traffic volume is 249 vehicle movements per hour which comprises an average 208 staff vehicles either arriving or leaving in any given hour over the seven-day survey period, coupled with an average of 41 milk tanker and service vehicle movements.
- 13 The milk tanker, service vehicle and staff movements predominantly travel west along Canal Road, connecting to Factory Road and Farm Road to access the State Highway One and wider transport network. The main traffic routes used by traffic associated with the Site with Average Daily Traffic (ADT) volumes and heavy vehicle percentages¹ are included in **Attachment Two**.
- 14 I have reviewed these ADT and heavy vehicle proportions, and referred to Austroads Guide to Traffic Management Part 3 Traffic Study and Analysis Methods to estimate the likely capacity of the surrounding network. I have calculated that:
- 14.1 With respect to State Highway One (SH1), the capacity of a two-way two-lane highway is generally 1700 vehicles per lane per hour or 3200 vehicles per hour two-way. Typical traffic profiles include up to 10% of daily traffic in peak hour which corresponds to a capacity of up to 32,000 vehicles per day (vpd). As observed in **Attachment Two** SH1 currently has 7,000 vpd to the north of the Orari River and 10,000 vpd to the south of Temuka.
- 14.2 I have applied the methods in section 5.1.1 of the Austroads manual to determine the hourly capacity of the other key corridors. This takes into consideration factors such as the road lane width, presence of shoulders, heavy vehicle percentage and topography. I have concluded that the local roads have capacities in the range of 830-1,500 vehicles per lane per hour. The current peak number of trips generated by the Site is 420 trips for the highest observed peak hour or an average of 249 trips per hour for a shift change (from paragraph 12). Noting that this traffic is distributed across several corridors as shown in **Attachment Two**, I have concluded that there is ample spare capacity on all local roads during peak.
- 14.3 In **Attachment Two** the local roads frequented by traffic from the Site currently experience daily traffic volumes in the range of 450 vpd through to 4,300 vpd. These daily flows are very low in the

¹ Sourced from Mobileroads.org which compiles RAMM traffic data from NZ Transport Agency Waka Kotahi, Timaru District Council and other Local Authorities throughout New Zealand.

context of the capacity of rural roads of this standard which I consider to be in the 8,300-15,000 vpd range.

- 15 Overall, I have concluded that all local and State Highway corridors in the vicinity that would likely be impacted on by any future development application at the Site are operating well below capacity. This means that the surrounding network is very unlikely to be sensitive to modest increments in traffic and has ample capacity to support background growth in activity for the foreseeable future.

ITA THRESHOLDS

- 16 An Integrated Transport Assessment (*ITA*) is the key deliverable produced by Transportation Planners and Engineers when assessing the impacts of a development for a spatial plan, plan change, resource consent application and/or notice of requirement. Guidance as to the contents of an ITA are stipulated in several documents including NZTA's Planning and Policy Manual Appendix 5C² and NZTA Research Report 422³. The guidance also sets out what is required in a 'basic' ITA and in a more comprehensive 'full' ITA.
- 17 ITAs are generally not required for smaller development applications. Typically, the requirement to prepare a basic or full ITA is a function of the scale of a proposal in terms of physical size, the quantum of traffic generated, or number of carparks. Second generation District Plans typically include thresholds for various development activities over which a basic or full ITA is required to be prepared. Timaru PDP follows the same approach as other second generation District Plans with the thresholds stated in TRAN-S20.
- 18 For industrial activities, the thresholds set out in TRAN-S20 are as follows:
- 18.1 A basic ITA is required where Gross Floor Area (*GFA*) exceeds 5,000 sqm; and
- 18.2 A full ITA is required where GFA exceeds 12,000sqm.
- 19 For warehousing and distribution activities which are also typical in industrial areas the thresholds are as follows:
- 19.1 A basic ITA is required where GFA exceeds 6,500sqm; and
- 19.2 A full ITA is required where GFA exceeds 25,000sqm.
- 20 The thresholds for warehousing and distribution are higher as the traffic generation associated with the activity on a GFA basis is typically much

² <https://www.nzta.govt.nz/assets/resources/planning-policy-manual/docs/planning-policy-manual-appendix-5C-integrated-transport-assessment.pdf>.

³ <https://www.nzta.govt.nz/resources/research/reports/422>.

lower. This reconciles with published traffic generation rates for these activities in New Zealand, Australia and USA⁴.

- 21 I note that the Timaru PDP also includes a 'catch-all' threshold for mixed-use activities or 'other' activities not covered by the prior activity categories. These are expressed in vehicles movements in peak hour (vmph) and vehicle movements per day (vmd) and are as follows:
- 21.1 A basic ITA is required where vehicle movements exceed 50 vmph or 250 vmd (whichever is greatest); and
- 21.2 A full ITA is required where vehicle movements exceed 120 vmph or 1000 vmd (whichever is greatest).
- 22 My view is that the setting of appropriate ITA thresholds is important to avoid assessments of small development applications which are very unlikely to have a noticeable impact on the local and wider transport environment, and conversely to ensure that a suitable level of assessment is provided for larger-scale developments that may give rise to effects on the local and wider transport environment.
- 23 In the following section, I have considered the site-specific characteristics of the Site to establish an appropriate threshold.

CLANDEBOYE DAIRY FACTORY CONTEXT

- 24 In the event that a development application was prepared for the Site, the 'industrial activity' thresholds from TRAN-S20 would be the default thresholds.
- 25 In my experience, the thresholds for 5,000 and 12,000 sqm GFA are informed by typical traffic generation rates in the range of 1-2 trips⁵ for every 100 sqm GFA for industrial activity. I note that with the adoption of a typical traffic generation rate of 1 trip per 100sqm GFA the thresholds in the Timaru PDP correspond to 50 trips ($=1*(5000/100)$) and 120 trips ($=1*(12000/100)$) for a basic and full ITA respectively. This matches the traffic generation for the 'mixed use and other activity' category identified in TRAN-S20.
- 26 I have calculated the actual traffic generation associated with the Site based on the 2019 Data to understand the local traffic generation context. I have calculated the current site area and GFA based on recent aerial photography. The calculation of GFA is conservatively low in that I have assumed only one level of floor area in each building footprint (however I understand from the Site that the dryers and some other parts of the factory have multiple levels).
- 27 I have concluded that the currently developed area of the site is 36.7 Ha and the GFA is approximately 101,000 sqm GFA. I have subsequently

⁴ Refer Table 8.10 of NZTA Research Report 453 (2011) available at <https://www.nzta.govt.nz/assets/resources/research/reports/453/docs/453.pdf>

⁵ NZTA Planning and Policy Manual Appendix 5B includes 2 trips/100sqm GFA for Industrial; RTA Guide to Traffic Generating Developments includes 1 trip/100 sqm GFA for Manufacturing activities.

calculated the observed trip rates as a function of GFA based on the traffic survey data presented in paragraph 12.

- 28 These trip rates coincide with the shift changes when staff are arriving or departing at the Site, with a peak trip rate of 0.42 ($= 420 * (100/101,000)$) and average trip rate of 0.25 ($= 249 * (100/101,000)$) vehicle movements per 100 sqm GFA. These are considerably lower than the standard industrial trip rates from literature presented in paragraph 25 above which are typically in the order of 1-2 trips per 100 sqm GFA.
- 29 Based on the calculated actual trip rates at the factory, a hypothetical future development application of 5,000 sqm GFA would trigger the requirement for the preparation of a basic ITA under TRAN-S20, despite this only likely generating an additional 12-21 two-way vehicle trips per hour to the wider transport network. In my view this addition of traffic to the surrounding transport network would be largely inconsequential and corresponds to one additional vehicle movement every 3-5 minutes.
- 30 I recommend that in the case of the Site, the thresholds for 'mixed use and other activities' in TRAN-S20 are more appropriate. The basic ITA threshold of 50 trips in peak hour approximates to less than one vehicle per minute, and the full ITA threshold of 120 trips in peak hour corresponds to two vehicles per minute.
- 31 Ms Tait has requested that I comment on the suitability of a rule that requires an ITA to be prepared up activities that increase the capacity for milk processing or storage, but not for projects that do not add to the capacity of the Site such as a biomass project. I understand that activities that do not add capacity to the Site are generally unlikely to increase the traffic generation of the Site, both in terms of heavy vehicle and staff vehicle movements. For the avoidance of doubt, I consider that the proposed adoption of the thresholds for 'mixed use and other activities' in TRAN-S20 remains a suitable means of addressing all types of activities and that the vehicle generation can be simply calculated at the Site based on production capacity, site maintenance requirements and staff numbers. An additional rule would in my view add complexity and an element of redundancy to the Plan.

CONCLUSION

- 32 I have reviewed traffic generation data associated with the Fonterra Clandeboye Dairy Factory and concluded that the actual trip generation rate of the Factory is significantly lower than the corresponding industrial trip rate in TRAN-S20 of the PDP.
- 33 I have sourced traffic volumes and calculated the capacity of local and State Highway corridors in the vicinity that are frequented by Site traffic and would likely be impacted on by any future development application associated with the Site. I have concluded that all corridors are currently operating well below capacity and will continue to do so for the foreseeable future.

- 34 The current industrial trip rate in TRAN-S20 is based on an increment in GFA, and in my view is not a suitable threshold for requiring a transportation assessment for development at the site. This is because the Site has a much lower traffic generation rate when calculated on GFA. I further note that the surrounding transport network has substantial spare capacity so would not be sensitive to small increments in traffic. If the industrial threshold were applied, my expectation is that subsequent transport assessments would be focusing on an inconsequential increase in traffic activity in the order of one vehicle every 3-5 minutes. I do not consider this appropriate or necessary.
- 35 I have recommended the 'mixed use and other activity' trip rate within TRAN S-20 be relied on. This corresponds to approximately one vehicle every minute (for a basic ITA) or two vehicles per minute (for a full ITA). In my view this is an appropriate threshold which is comparable with thresholds for other activities in terms of the number of vehicles generated and corresponding potential to impact on the surrounding transport network.

David John Robert Smith

5 July 2024

ATTACHMENT ONE

Fonterra Clandeboye Trip Generated Survey (extract from Beca assessment)
summary

Vehicle Type	Peak Day	7 Day Average	Peak Hour ⁶	Ave Hour ⁷
Light vehicles (staff)	972	832	360	208
Milk tankers	1160	983	59	41
Service vehicles	28	14	1	1
All vehicles	2156	1828	420	249

⁶ Highest recorded hour coinciding with a staff shift change

⁷ Average hour coinciding with a staff shift change

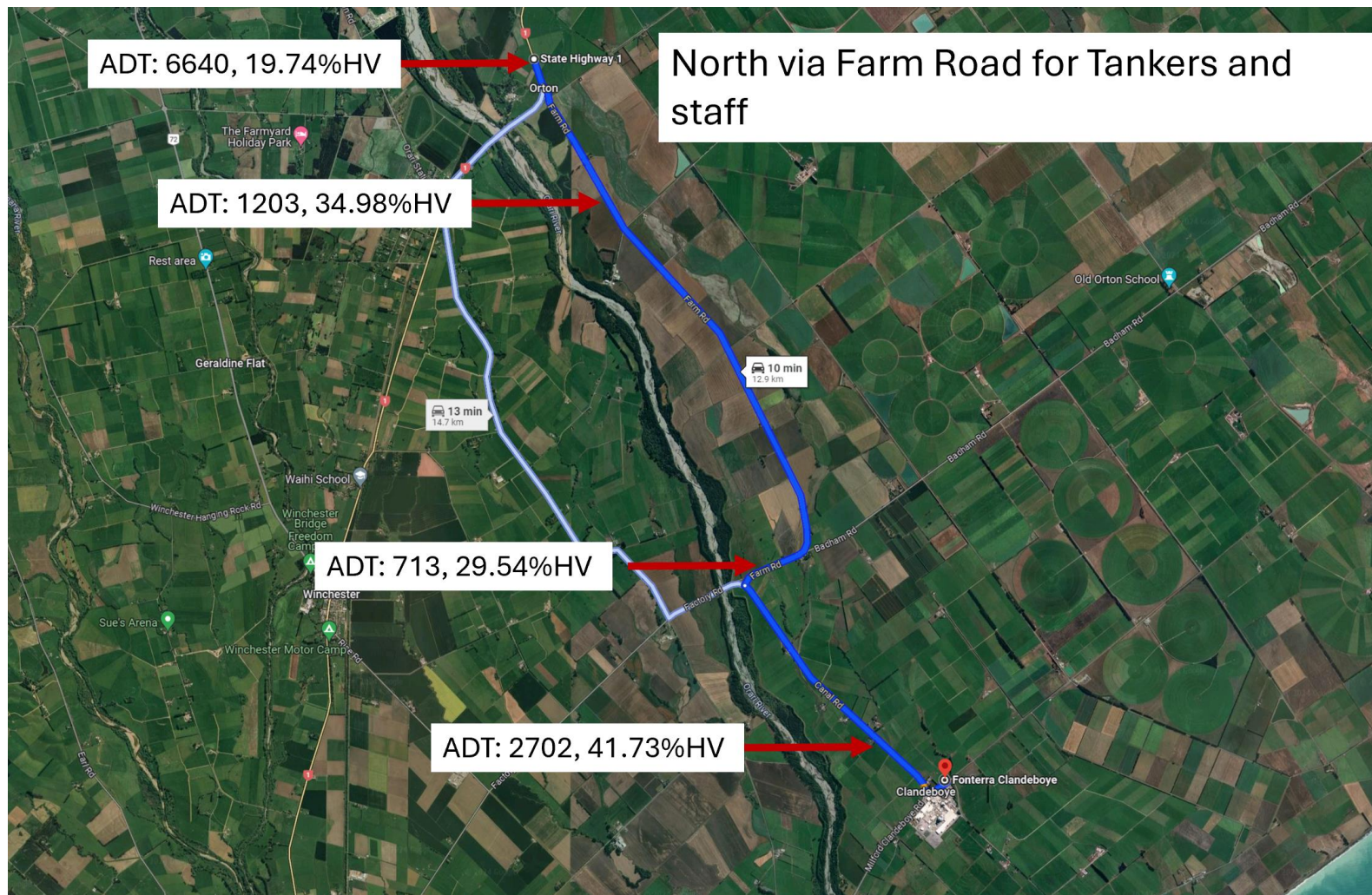
ATTACHMENT TWO ESTIMATED TRAFFIC VOLUMES ALONG KEY ROUTES

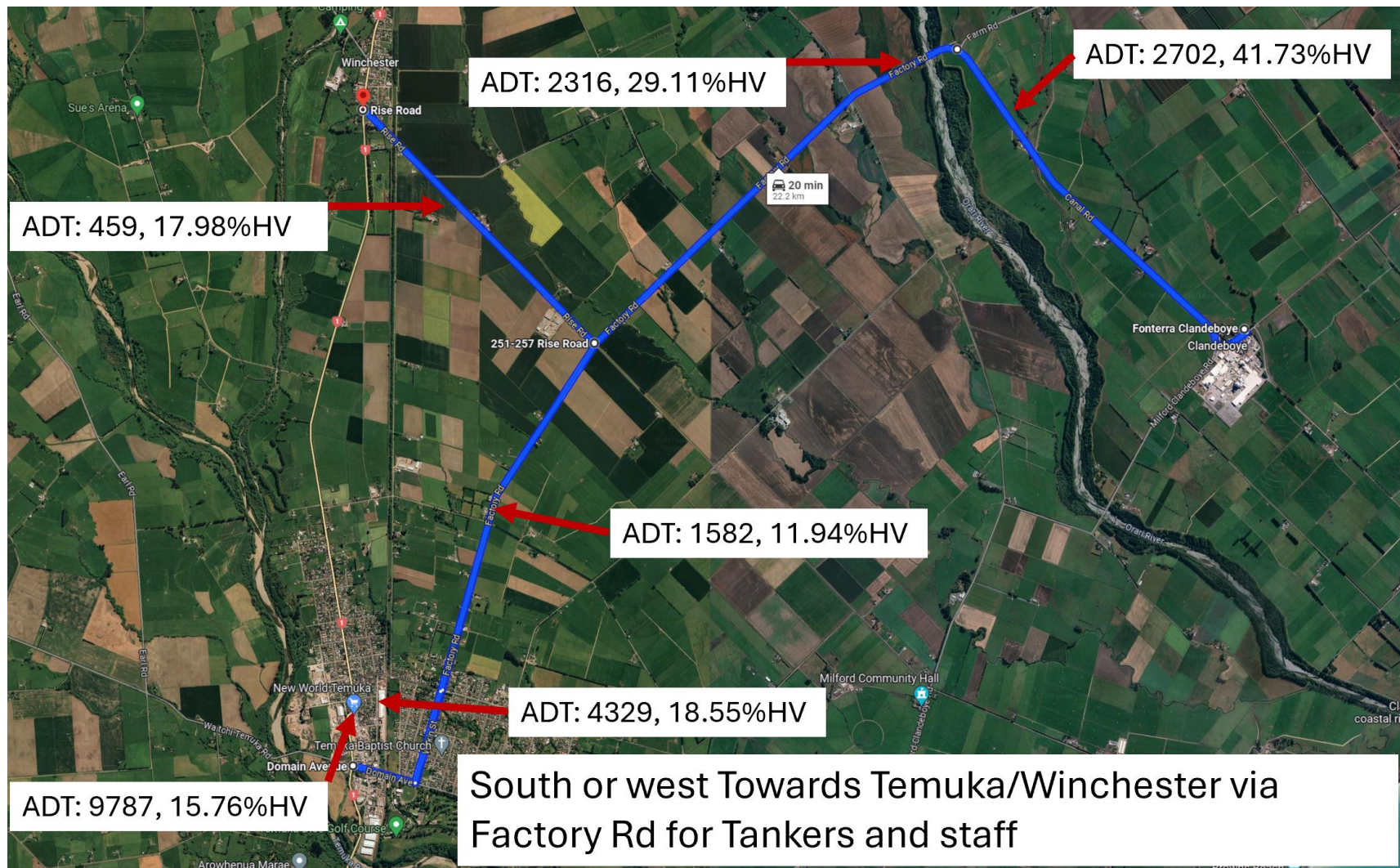
Page 1 This is the route to travel to/from SH1 north for all tankers, service vehicles and staff.

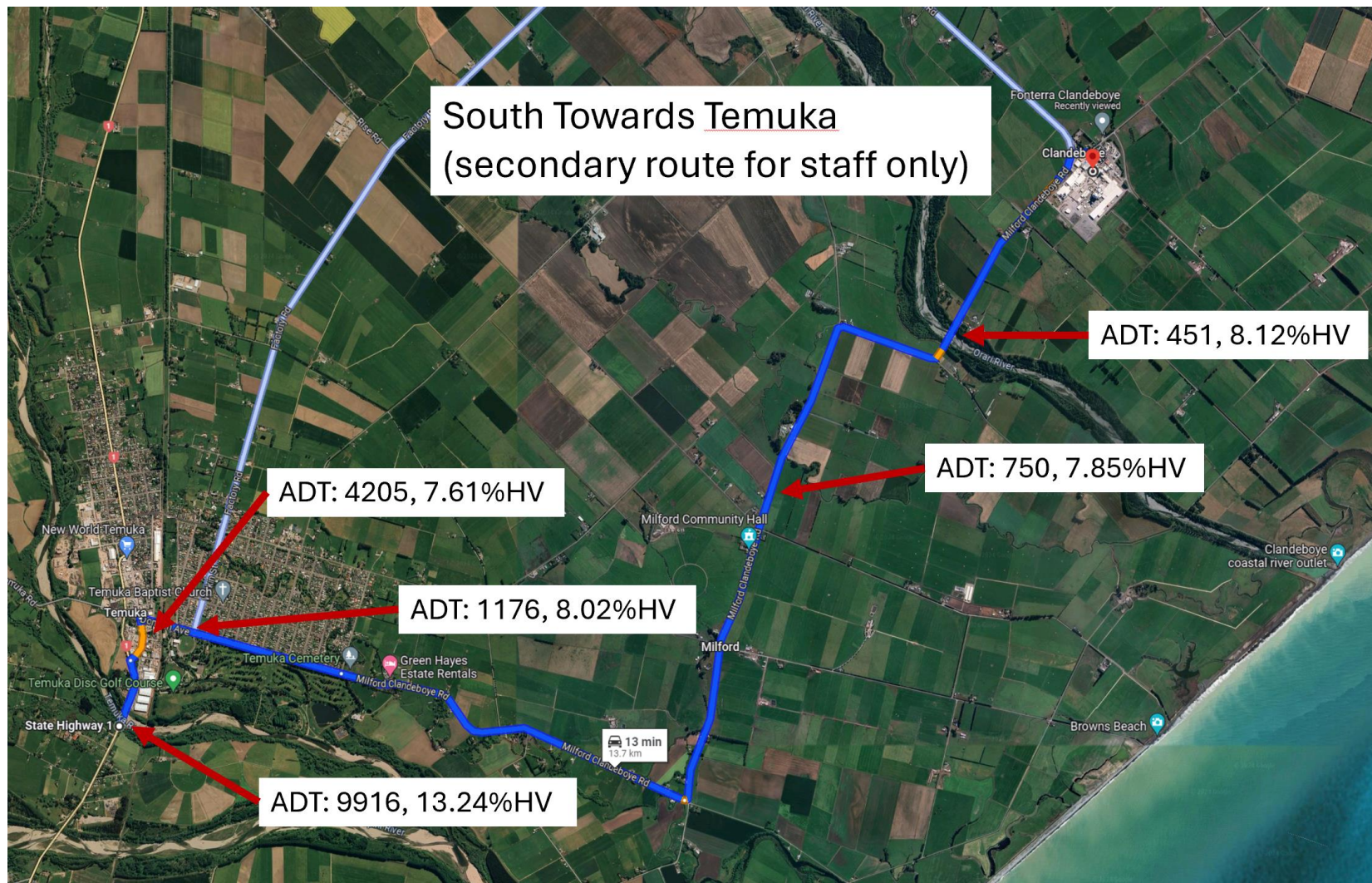
Page 2 This is the route to travel to/from SH1 south and inland towards Geraldine for all tankers and service vehicles, and is the primary and recommended route for staff. The Rise Road link to Winchester is the most direct route into Geraldine and inland South Canterbury.

Page 3 This is the secondary route to/from SH1 south which some staff only take.

(source of all maps/aerial photography: Google Maps)







APPENDIX B

	Signage	Subdivision	Temporary buildings associated with temporary events	Heritage investigations and temporary works	(Minor) works within a heritage setting, incl earthworks and lifting	Heritage upgrade works / building safety / earthquake strengthening	Maintenance or repairs	Reconstruction / restoration	Alterations or Additions	New (larger) buildings	Relocation within setting	Relocation outside setting	Demolition
Permitted activity	CCC SDC		CCC TDC	CCC WDC	CCC SDC WDC	CCC* WDC	CCC SDC TDC WDC	CCC*					
Controlled activity	TDC (official)					CCC** SDC		CCC**					
Restricted discretionary activity	WDC TDC (freestanding)	CCC SDC WDC			TDC	TDC			CCC SDC WDC	CCC SDC WDC TDC	CCC SDC WDC		
Discretionary activity	TDC (attached)	TDC							TDC		TDC	CCC SDC TDC WDC##	CCC## TDC## WDC##
Non-complying activity												WDC#	CCC# SDC TDC# WDC#
Prohibited activity													

Generic summary of activities. All permitted activities are subject to conditions / restrictions which are not captured here.

Earthquake response removed, as well as site specific treatments (eg, Christchurch Cathedral)

*Subject to a certified heritage works plan

** Not subject to a certified heritage works plan

Cat 1

Cat 2