

under: the Resource Management Act 1991

in the matter of: An application by Eastland Port Limited for land use consents, coastal permits and other consents related to the Port of Gisborne upgrade project known as "Twin Berth Stage 2"

between: **Eastland Port Limited**
Applicant

and: **Gisborne District Council**
Consent Authority

Statement of evidence of **Judith Makinson** on behalf of Eastland Port Limited

Dated:

3 October 2023

Reference: Alana Lampitt (alana.lampitt@chapmantripp.com)
Hadleigh Pedler (hadleigh.pedler@chapmantripp.com)

chapmantripp.com
T +64 9 357 9000
F +64 4 472 7111

PO Box 2206
Auckland 1140
New Zealand

Auckland
Wellington
Christchurch



STATEMENT OF EVIDENCE OF JUDITH MAKINSON ON BEHALF OF EASTLAND PORT LIMITED

INTRODUCTION

- 1 My full name is Judith Victoria Makinson.
- 2 I am a Director at CKL, specialising in transportation engineering. I hold a Bachelor's degree in civil engineering, and a Master's degree in transportation engineering and planning from the University of Salford (UK). I am a Chartered Professional Engineer and a Chartered Member of Engineering New Zealand. I am also a Chartered Engineer in the United Kingdom and a Member of the UK Institution of Civil Engineers. I have over 25 years' experience working as a transportation engineer in both New Zealand and the United Kingdom with Arup, WSP Group, Gifford, TDG, Stantec and CKL.
- 3 I have undertaken Integrated Transportation Assessments (*ITAs*) for major developments such as for 180ha of industrial land at Southern Gateway in Auckland and 450 residential dwellings at Northview in Hamilton. I have experience in assessing the traffic and transportation effects of rezoning land through plan change processes, including acting for South Waikato District Council in relation to rezoning 40ha of rural land to industrial land in Putāruru.
- 4 I am qualified as an Independent Hearing Commissioner and have experience considering the effects of major infrastructure projects through notice of requirement processes as well as individual resource consent applications. These include the Te Ahu a Turangi Manawatū Gorge road replacement and the Kiwirail Regional Freight Hub at Bunnythorpe.
- 5 My evidence is given in relation to Eastland Port Limited's (*Eastland*) applications for land use consents, coastal permits and other consents (*Application*) for the second and final stage of the Twin Berths Project (the *Project*).
- 6 In preparing this evidence I have conferenced with Mr Glenn Connelly a Senior Safety Engineer from Waka Kotahi (*WK*) and Mr Chris Rossiter who is a Principal Transportation Engineer (Stantec NZ) representing Gisborne District Council (*GDC*). We have prepared a Joint Witness Statement (*JWS*) dated 1 September 2023 which is appended to my evidence as **Appendix A**.
- 7 I am familiar with the area that the Project covers. I have read the Transportation Assessment Report (*TAR*) prepared by East Cape Consulting (*ECC*) lodged on 22 August 2022 in relation to the Project. I agree with and support the report's assessment and conclusions. Following completion of the TAR, my role on the Project has been to provide expert transportation advice to the

project team, consulting with GDC and WK on behalf of Eastland, and acting as an expert witness for Eastland.

- 8 I have read the section 92 response prepared by ECC (dated 9 May 2023) lodged on 18 May 2023 (*Section 92 Response*) and I agree with the information provided.
- 9 I am familiar with the Project site and have undertaken a site visit in June 2022 to observe both peak hour road network and on-site operations.
- 10 I have read the relevant sections of the Assessment of Environmental Effects (*AEE*) that accompanied the Application when preparing my evidence. I have also read the public submissions lodged in relation to the Project.

CODE OF CONDUCT

- 11 Although these proceedings are not before the Environment Court, I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note (2023), and I agree to comply with it as if these proceedings were before the Court. My qualifications as an expert are set out above. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 12 My evidence will deal with the following:
 - 12.1 A summary of the existing environment as relevant to transport effects;
 - 12.2 A summary of transport effects, based on both the TAR prepared by ECC, my own separate review and analysis, and discussions with Mr Connelly and Mr Rossiter.
 - 12.3 My response to transport issues raised in submissions;
 - 12.4 My response to the transport matters addressed in the Council Officer's Report under section 42A of the Resource Management Act 1991 (*RMA*) (*Officer's Report*);
 - 12.5 My comments on the draft conditions; and
 - 12.6 My conclusions.

SUMMARY OF EVIDENCE

- 13 A summary of my evidence is as follows:
- 13.1 Mr Connelly, Mr Rossiter and myself (referred to jointly below as 'the experts') agree that the TAR and Section 92 Response provide a suitable assessment of existing transport infrastructure and traffic data on which to base an assessment of potential traffic effects.
- 13.2 With respect to the existing traffic environment:
- (a) Existing delays in funding and upgrading of the Hirini Street / SH35 intersection has led to a degradation of intersection capacity and performance.
 - (b) Existing traffic growth on SH35 has occurred at a rate of around 1.3% per annum since 2013, with the variation in daily traffic demands being some +/- 9.6%.
- 13.3 With respect to effects of the Project:
- (a) In relation to road safety, it is my opinion that the Project will have a negligible effect on the road network. It is acknowledged by all the experts that there are a range of factors to the road safety environment that might contribute to the potential need to upgrade the Hirini Street pedestrian crossing.
 - (b) I consider the effect of the Project on road maintenance is likely to be minimal, and the experts agree that such effects are unlikely to be of significance.
 - (c) I consider that the effect of the Project on peak hour traffic at the Hirini Street / SH35 intersection is likely to be some 0.22% increase in the short term and up to 1.3% increase in peak hour traffic assuming the second berth is fully operational in 2026. It is my opinion that this is a negligible level of effect and that there is unlikely to be an experiential change for drivers using the intersection.
 - (d) I consider that the change in daily traffic volumes on SH35 resulting from the Project is likely to be 1.8% by 2026 if the second berth is completed within this minimum timeframe. I consider that this level of change is well within the existing day-to-day variation in traffic flows on SH35 which is some +/-9.6%. Furthermore, I consider this small change in traffic

volumes is unlikely to significantly affect decisions on intersection investment and the timing of future works to the intersection.

- (e) I consider that changes in traffic as a result of any increase in the number of days per year that the Port is operating at peak as a result of the Project also lie within the existing expected range of day-to-day variation in traffic demands and is also unlikely to result in an experiential change for drivers.

13.4 I have considered and responded to traffic concerns raised by submitters:

- (a) While rail options do not form part of the application they were raised by some submitters. I do not consider that the use of rail would result in significant reductions in heavy commercial vehicles (*HCV*) traffic volumes, largely due to the proximity of the Gisborne rail sidings to the Port and that logs being hauled from forests to the North of Gisborne would pass the Port to reach Matawhero.
- (b) I also consider that the effects of increased HCV traffic associated with the Project is in keeping with the function of both SH35 and Ormond Road as freight routes.

13.5 With respect to mitigation measures:

- (a) The experts agree that adoption of consent conditions requiring a Construction Traffic Management Plan (*CTMP*) and an Operational Traffic Management Plan (*OTMP*) is appropriate;
- (b) I consider that the CTMP will provide an appropriate framework through which to actively manage the temporary effects of construction traffic, with this likely to be some 16 HCV per hour and 150 HCV per day at peak levels of construction activity; and
- (c) I consider that the OTMP also provides a suitable framework to support appropriate stakeholder consultation, support and encourage staff to make more sustainable travel choices, and to promote suitable HCV access to the Port.

14 Overall, it is my opinion that:

- 14.1 With the implementation of the CTMP, construction traffic effects of the Project of some 16 HCV/hour or 150 HCV/day¹ at peak construction activity, subject to detailed design, will be appropriately managed for the duration of the construction period and will provide a suitable mitigation of temporary traffic effects.
- 14.2 The incremental changes in traffic volumes that may be associated with the operation of the Project's second berth are negligible when considered in the context of existing and future expected traffic volumes.
- 14.3 The Project's operational traffic effects do not constitute an effect that requires avoidance, mitigation or remediation, however, the implementation of the OTMP will provide a framework to support potential reductions in future Project traffic demands.
- 15 In conclusion, it is my opinion that:
- 15.1 a 1.3% increase in peak hour traffic at the Hirini Street / SH35 intersection assuming the second berth is fully operational in 2026 represents a less than minor effect in both capacity and road safety terms;
- 15.2 the change in daily traffic volumes on SH35 resulting from the Project is likely to be 1.8% by 2026 and that this level of change is well within the existing day-to-day variation in traffic flows on SH35 which is some +/-9.6% and is a negligible effect;
- 15.3 any increase in the number of days per year that the Port is operating at peak as a result of the Project also lie within the existing expected range of day-to-day variation in traffic volumes and is also a negligible effect;
- 15.4 the conditions I have recommended and are proposed by Eastland in Ms McPherson's evidence are appropriate to manage the construction and operational traffic effects of the Project; and
- 15.5 there is no traffic or transportation reason why resource consent for the Project at the Port should not be granted.

EXISTING ENVIRONMENT

- 16 The existing transport environment is as outlined in the JWS in paragraphs 5–41, 48–50 and 53. By way of summary:

¹ As per AEE Section 13.10.1, based on Worley Report.

- 16.1 The site location (outlined in red) and surrounding road network are shown in **Figure 1**.

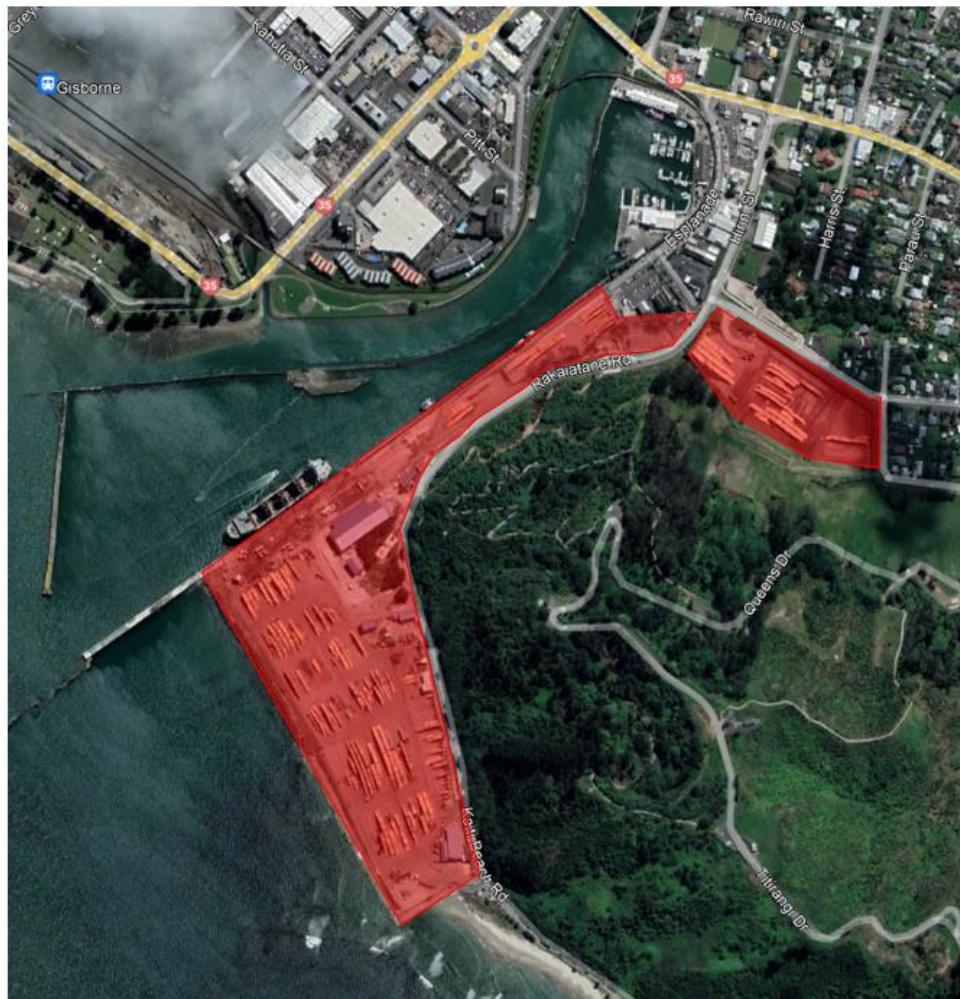


Figure 1: Site Location and Road Network

- 16.2 Road access to the site is from Kaiti Beach Road, Rakaiatane Road, Hirini Street and SH35 Wainui Road (SH35).
- 16.3 The speed limit on these roads is 50km/h. The average operating speed on Hirini Street is around 45km/h – 47km/h.
- 16.4 In the vicinity of the SH35 / Hirini Street intersection, SH35 is a 14m wide 2-lane road with a 3m wide flush median. There are shoulders to both sides with on-street parking allowed in some areas. There are footpaths on both sides of the road but no marked cycle lanes in the vicinity of Hirini Street. It carries around 21,000vpd (vehicles per day) of which around 3% are HCVs.
- 16.5 Hirini Street is some 290m long and runs between SH35 and Crawford Road. It carries some 5,000vpd of which 13% -

21% are HCVs. It is a 12m wide 2-lane road centreline and edge lines defining 3.5m wide traffic lanes. On -street parking is generally permitted and there is a foot path on the east side of the road. This crosses to the west side of the Hirini Street at a formal crossing point just north of Crawford Road. Speed humps are also present to either side of this crossing.

- 16.6 Rakaiatane Road is some 470m long and carries some 2,600vpd of which around 21% are HCVs. It has an 11m wide road with a centreline and 3.5m wide traffic lanes. On-street parking is prohibited. There is a shared path on the west side of the road and speed humps are also present. A mid-block crossing to the Titirangi Reserve is provided. There is a second, informal crossing point just north of the Cook Memorial which links the road footpath with the pathways in the Titirangi Reserve.
- 16.7 Kaiti Beach Road is a continuation of Rakaiatane Road. On-street parking is generally prohibited except for indented parking bays. Speed bumps are present at intervals in the carriageway. Some 9 or 10 dwellings, the foreshore and the Gisborne Yacht Club are accessed south of the Port. The footpath in the Titirangi Reserve rejoins Kaiti Beach Road at its southern end, where a pedestrian crossing point is in place.
- 16.8 Crawford Road runs generally east/west between Hirini Street and SH35 as it heads southeast, away from the Gisborne CBD. It carries around 2,200vpd with minimal HCV traffic. Crawford Road is some 11.8m wide with 3.1m wide traffic lanes. A dedicated two-way cycle path was completed along Crawford Road late in 2021. The upper log yard, fuel stop and trailer lift are located at the west end of Crawford Road, near the intersection with Hirini Street.
- 16.9 The Hirini Street / Crawford Road intersection is a give-way controlled priority-t-intersection with no marked turning lanes, although the Crawford Road approach is wide enough to allow for vehicles to wait alongside each other at the limit line.
- 16.10 The SH35 / Hirini Street intersection is a stop-controlled t-intersection. Formal left and right turn lanes provided on SH35 Wainui Road and Hirini Street are wide enough at the limit line for left and right turning vehicles to wait alongside each other.
- 17 The JWS notes the following matters of agreement between the experts:

- 17.1 The existing transportation networks are appropriately described in the TAR.
- 17.2 The Hirini Street / Rakaiatane Road / Kaiti Beach Road corridor functions as an urban connector road in the context of the One Network Framework (*ONF*).² This corridor is identified as a freight route and a road corridor where HCV are permitted by GDC bylaw.
- 17.3 The existing traffic demands identified in the TAR and as summarised in the JWS represent a suitable basis on which to base an assessment of any traffic effects arising from the Project.
- 17.4 The crash history at the Crawford Road / Hirini Street intersection is consistent with expectations for an intersection of its nature. There are safety improvement opportunities at the Hirini Street pedestrian crossing, but it is recognised that there are a range of contributing factors to the need for such improvements.
- 17.5 There are existing capacity and road safety concerns at the SH35 / Hirini Street intersection that need to be addressed, irrespective of, and predating the Project. Although the intersection upgrade is identified in the Regional Land Transport Plan (*RLTP*), funding allocation for completion of the intersection work is unclear (as such allocations are on hold pending the completion of the Network Operating Plan³). As such, there is no clear commitment to undertake the work in the near future.

SH35 / Hirini Street Intersection

- 18 The existing operation of the SH35 / Hirini Street intersection is covered in detail in the TAR⁴ and JWS⁵. By way of summary:

² The One Network Framework (*ONF*) is a national road classification system that considers both movement function i.e how many person trips are performed each day, and place function i.e what is the experiential value of the space, of a road. It is replacing the current One Network Road Classification (*ONRC*) system which has the same focus on providing national consistency, but is focused on traffic volumes. Councils are required to have classed their roads under the ONF by December 2023, noting that some ONF classifications are not yet confirmed.

³ A Network Operating Framework (*NOF*) is a workshop based process that links strategic intent for the road network with operational and planning decisions. It is intended to provide a 'one network' view across travel modes so that each road in a network hierarchy has priority allocated by mode, type of place and time of day. The outcome of the NOF is to have a Plan for Network Operations / Network Operating Plan (*NOP*). The relationship between the NOP and the ONF is iterative in that a draft ONF classification is needed to identify how the road network hierarchy is currently operating, with the outcome of the NOP being a 'future' ONF identifying how the road network needs to change to meet the desired hierarchy based on mode, time and place.

⁴ Sections 6.1, 6.2, 6.3.

⁵ Paragraphs 17 – 27.

- 18.1 The existing crash records show that the intersection is currently experiencing higher than expected crash rates based on the general crash prediction models from the WK Crash Estimation Compendium. At the time of writing the TAR, the intersection experienced a crash rate of 0.8 crashes per year compared to an expected crash rate of 0.45 crashes per year.⁶ I note that the typical daytime crash mechanisms involve rear end or turning through traffic type events. These are typical of a congested network.
- 18.2 HCVs make up some 4% - 7% of peak hour traffic volume at the intersection, but did not feature in the crash records as being involved in the incidents.
- 18.3 Existing traffic volumes through the intersection include Port operational traffic. A typical weekday traffic volume profile for the Hirini Street approach to the intersection is shown in **Figure 2**.⁷ This data was obtained from the Automatic Traffic Counts (ATC) undertaken in August and November 2020 as per Section 5.3 of the TAR.

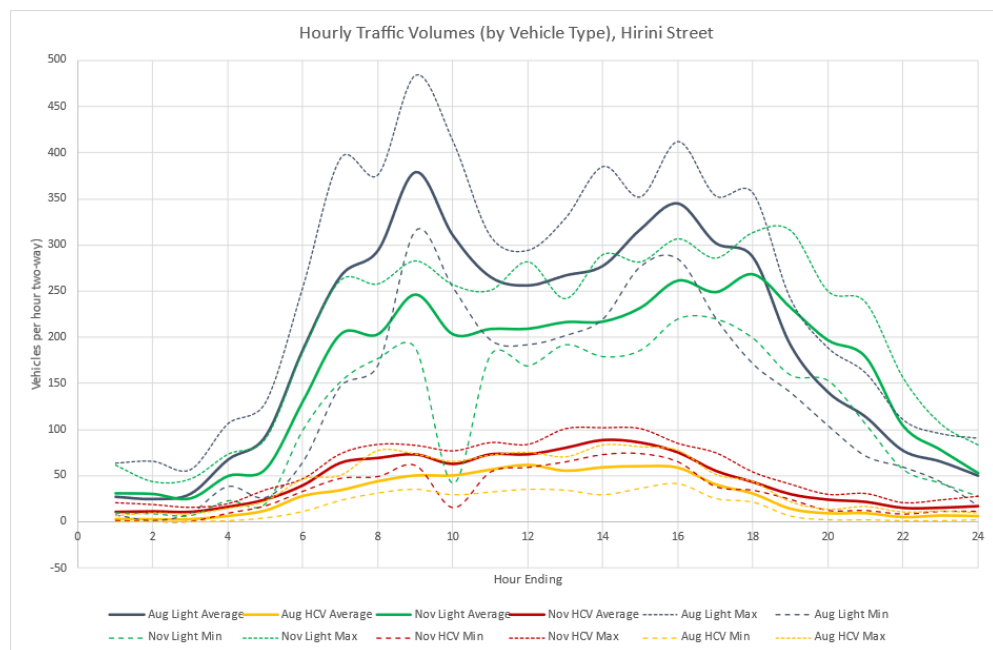


Figure 2: Hirini Street Daily Traffic Volume Profiled by Vehicle Type

⁶ I have updated the review of crash records and the crash estimation models to reflect any change since completion of the TAR. This is included as Appendix B. I note that the predicted injury crash rate is 0.4 and the observed injury crash rate is 0.73. This has not changed significantly since the TAR

⁷ Replicated from JWS Figure 5.

18.4 The performance of the intersection as modelled using SIDRA⁸ is provided in **Table 1**.⁹ This shows that the intersection is currently operating above capacity during the AM and PM peak periods level of service (LOS) 'F' and at the upper limit of generally acceptable operations of LOS 'E' in the inter-peak period.

Parameter	AM Peak Hour	PM Peak Hour	Inter-Peak
Hirini Street Right Turn Delay	421 s/veh	73 s/veh	38 s/veh
Hirini Street Right Turn 95 th Percentile Queue	38 m	6 m	5 m
Hirini Street Left Turn Delay	135 s/veh	20 s/veh	17 s/veh
Hirini Street Left Turn 95 th Percentile Queue	104 m	18 m	12 m
Worst Movement LOS	F	F	E

Table 1: Modelled Existing Intersection Performance

18.5 Site observations show that the full degree of modelled delay and queues are not occurring due to drivers changing their behaviour in response to the road conditions. This includes taking smaller gaps in SH35 traffic to turn through, avoiding the more difficult turns, informally reversing priority at the intersection with SH35 drivers slowing down to let turning traffic through.

18.6 Figure 3¹⁰ shows the estimated hourly pattern of intersection operation across the day, as presented in the TAR.

⁸ Signalised & unsignalised Intersection Design and Research Aid (traffic engineering software).

⁹ Level of service (LOS) D or E in urban networks is generally taken as the upper limit of acceptable operation, with LOS E representing an approach or intersection operating at close to capacity, with long queues likely to be evidence. LOS F indicates that a movement, approach leg or intersection is congested and that demand exceeds capacity. LOS thresholds used in the SIDRA are presented in Appendix G of the TAR.

¹⁰ Replicated from Figure 38 of TAR.

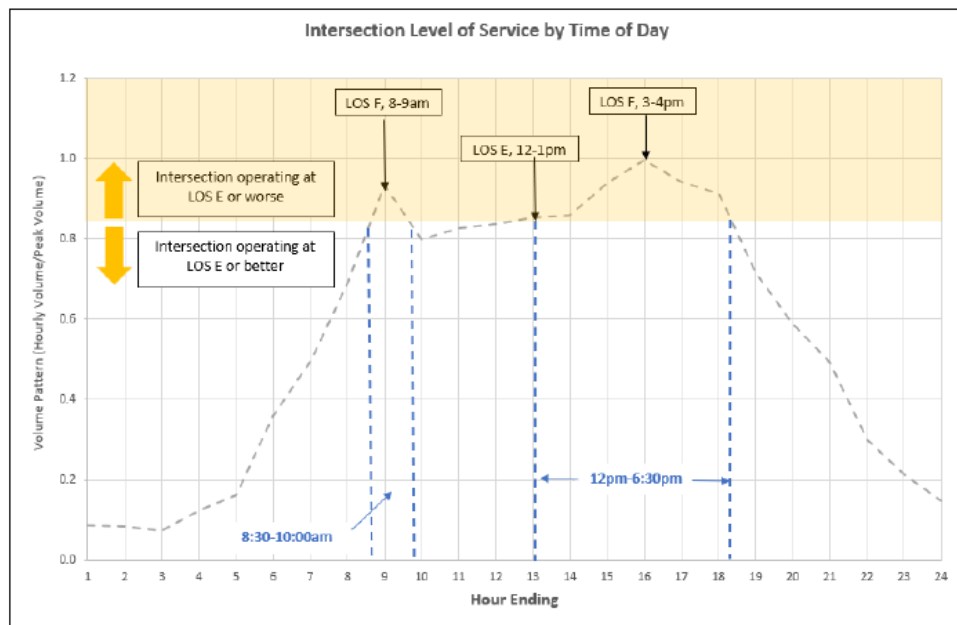


Figure 3: Estimated Hourly Intersection Performance

- 18.7 The intersection is likely to operate at LOS 'E' or LOS 'F' for between around 8.30am and 10am and then from around 12pm to 6pm. At other times of day, the intersection operation is likely to be at LOS 'D' or better.
- 19 Waka Kotahi has confirmed that the Hirini Street / SH35 intersection has been allocated funding under the Safety Improvement Programme for 2024. Interim improvements by WK and GDC may be able to be made, such as improved markings, parking control, provision of cycle lanes, lower speeds, pram crossings and centre islands. Ideally these should be consistent with the future plans for the transport network.
- 20 Further to the TAR, I have considered annual traffic growth on SH35 using data from the WK Traffic Monitoring System (TMS) count site ID: 03500327 located south of Harris Street. This shows that traffic volumes along SH35 have grown some 1.3% per annum since 2013, from around 17,446vpd to 20,232vpd in 2023. This is shown by the best fit line in **Figure 4** below, with the underlying data being provided in **Appendix B**. I consider the use of a best fit line over 10 years to be an appropriate way to assess overall changes in traffic patterns. Taking this long-term assessment period minimises distortion of recent events on travel patterns, such as Covid-19.

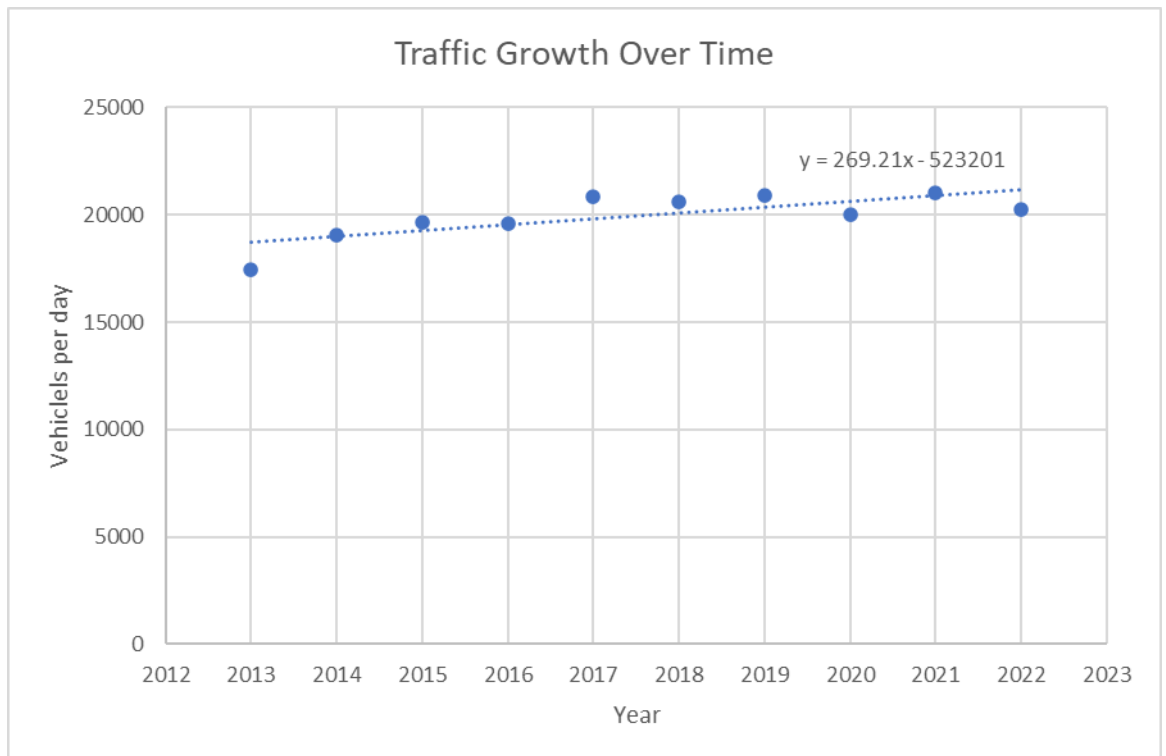


Figure 4: SH35 Average Daily Traffic Demand Growth 2013 - 2023

Existing Daily Traffic Variation

- 21 I have obtained daily traffic data for SH35 from the TMS database for 2021 and 2022, excluding days affected by Covid-19 lockdowns.¹¹ I considered light vehicles only to reduce the effects of current Port operations on daily traffic variation. I have therefore assessed the average light vehicle volume on SH35 as being 21,267vpd, with the standard deviation¹² being 2,034vpd. Traffic data from Covid-19 lockdown periods has been removed to reduce the variation in daily traffic demands this would introduce. Overall, this provides a conservative assessment of daily traffic variation. A summary of this analysis is provided in **Appendix C**. Applying this +/- 9.6% degree of variation to the unfiltered 2022 average daily traffic volume of 20,232vpd, means that traffic volumes of between 18,290vpd and 22,174vpd would be considered normal.
- 22 I note that this daily variation in traffic demand is greater than the annual growth factor of 1.3% previously discussed. What this means is that as the typical average daily traffic volume increases, the 9.6% variation can occur either side of that. I have demonstrated this visually in **Figure 5** below.

¹¹ From Waka Kotahi count site ID:03500327 located south of Harris Street.

¹² Standard deviation is a quantity expressing by how much individual data points vary from the average value.

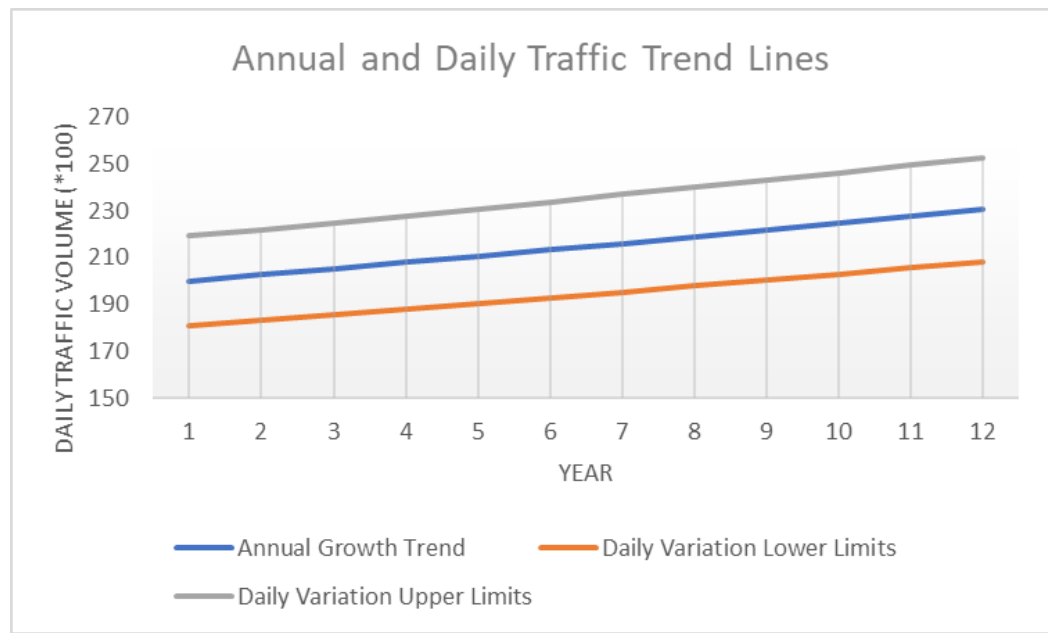


Figure 5: Annual Traffic Growth and Daily Variation Trend Lines

SUMMARY OF OPERATIONAL TRANSPORT EFFECTS OF THE PROJECT

23 The Project will have a range of actual or potential effects on the transport network which are addressed and assessed below:

Heavy Vehicle Traffic Generation and Network Function

24 Future HCV traffic demands resulting from operation of the Project are discussed in the JWS.¹³ By way of summary:

24.1 The underlying driver for log movements and associated increase in traffic movements to and from the Port is the harvesting of the forest, which is expected to reach 4.2 million tonnes per annum by 2030. The timing for when this demand could be catered for is dependent on both consenting and construction timeframes, but I understand from Mr Martin Bayley that the second berth could be completed as early as 2026 if it were to secure consents promptly.

24.2 The existing average daily cart in volume of logs is approximately 10,300m³. The Project would likely increase this to approximately 13,900m³ on average.

24.3 While Eastland may undertake other actions to generate further efficiencies, in essence, to reach the anticipated 4.2 million tonnes of log exports per year, the Project is needed. This is because the practical handling capacity of the Port at approximately 16,500m³ of logs per day is unlikely to be able

¹³ Paragraphs 42-47.

to be reached on enough days per year without the Project in place. I understand from Mr Bayley that this practical handling capacity is driven by the landside space available and is not a factor of how many ships can berth and be loaded at one time.

- 24.4 I particularly note that Mr Rossiter considered that the potential traffic effect at the intersection may be less than the absolute difference between the existing (10,300m³ average) and future (approximately 13,900m³ average) traffic demands, due to existing abilities for the port to increase the average daily cart in volume.
- 25 The TAR addresses the Project's expected level of additional HCV traffic. Specifically, it notes that:
- 25.1 The forecast peak annual demand of 4.2 million m³ of logs equates to an average of 13,900m³ of logs per day.
- 25.2 The port can and does operate at this level already. It handled a volume of 13,900m³ or more on 127 days in the three years to 31 March 2022.
- 25.3 The Project's key effect on HCV traffic is that it will enable these sorts of higher volume days to occur more regularly and therefore increase its average level of log loading daily activity.
- 25.4 The Project will enable this to be achieved by being active on more days each year (due to fewer shipping delays and weather interruptions) and achieving more consistent throughput on those days.
- 26 I agree with the above conclusions of the JWS and the TAR. I further consider that:
- 26.1 The function of SH35 as an urban connector road is to carry high volumes of traffic, including freight. The continued use of SH35 as part of the road route to bring logs to the Port is aligned with the intended function of SH35.
- 26.2 The GDC bylaw identifying the Hirini Street / Rakaiatane Road / Kaiti Beach Road corridor as a freight route clearly anticipates continued use of this road by HCVs and recognises its importance in providing access to the Port.
- 26.3 The upgrade of the pavement along the Hirini Street / Rakaiatane Road / Kaiti Beach Road corridor to a heavy-duty structural asphalt pavement in mid-2019 also recognises the importance of this corridor in terms of ongoing Port access.

Light Vehicle Staff Traffic Generation

- 27 The anticipated traffic effects associated with the Project's staff are as outlined in the JWS.¹⁴
- 28 The TAR included an assessment of the Project's generation of additional light vehicle traffic generation, based on the expectation that the Project would generate approximately 65 new roles, with up to 43 more staff being on the site at any one time. The assessed existing and future staff light vehicle traffic generation is expressed below in Figure 6.¹⁵

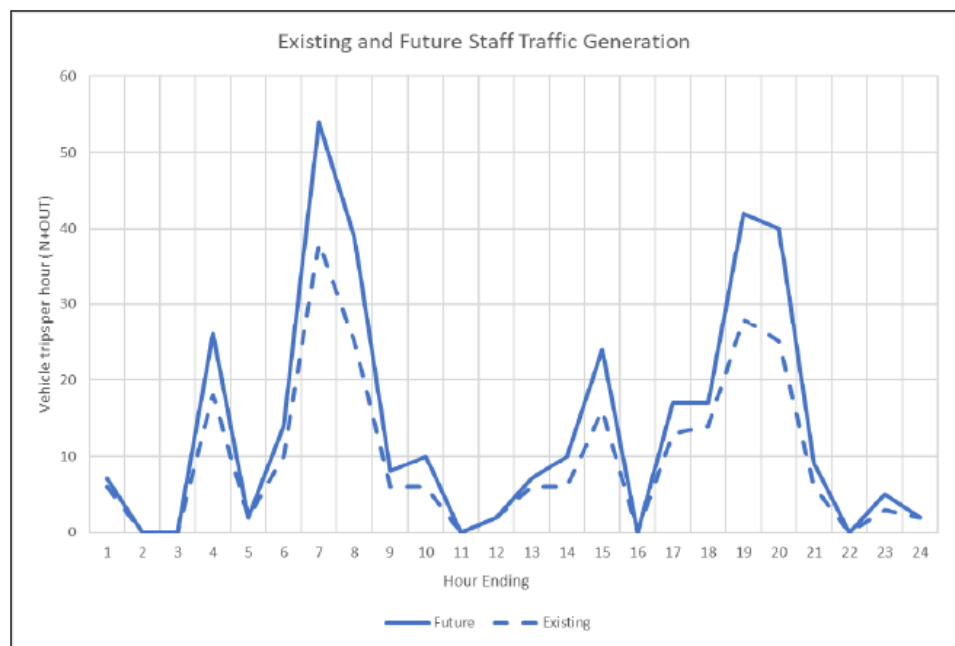


Figure 6: Existing and Future Staff Daily Traffic Generation Profiles

- 29 The TAR also concluded (see Figure 7 below) that the peak times associated with the Project's additional staff movements do not coincide with peak hours of operation of the wider roading network.

¹⁴ Paragraphs 51 and 52.

¹⁵ Replicated TAR, Figure 40.

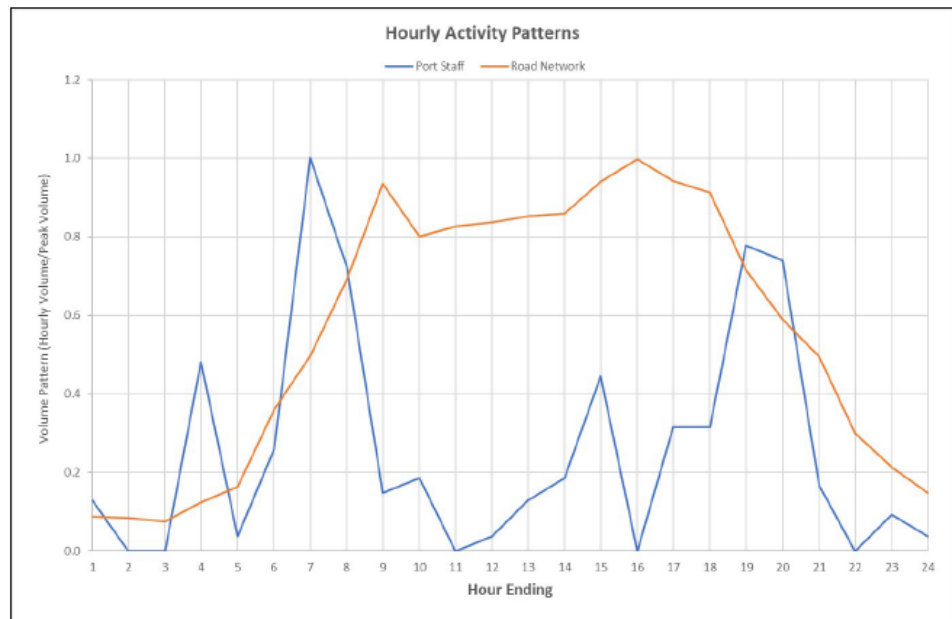


Figure 7: Future Staff Daily Traffic Generation Profile v Existing Traffic Volume Profile on Hirini Street

- 30 As outlined in the JWS, all the experts agree that increases in staff trips to and from the Port following the introduction of the Project are likely to be modest and have only a small effect on the operation of the road network.
- 31 I agree with the conclusions of the JWS. I consider these effects will be low and unlikely to have noticeable effects on peak hour operations at SH35 / Hirini Street. Furthermore, I note that the effects of staff traffic demands on the off peak periods are also likely to be minimal, given the expected increase in demand of 103vpd.
- 32 Notwithstanding the above, I consider it is appropriate to manage operational traffic effects via an OTMP. I agree with the TAR's recommendation that this be included as a consent condition and agree with the TARs suggested objective and proposed content, and provision for consultation with WK and GDC on the OTMP's development.
- 33 As per the JWS,¹⁶ the experts also agree that adopting an OTMP is an appropriate mechanism to assist in managing future Port traffic demands.
- 34 I agree with the conclusions of the JWS and note that an OTMP condition is proposed by Eastland (as attached to Ms McPherson's evidence).

¹⁶ Paragraphs 61 and 62.

Effects on the Hirini Street / SH35 Intersection

- 35 The key area of further consideration with respect to the effects of these increased levels of HCVs on the transport networks is the ability of the Hirini Street / SH35 Intersection to accommodate these increased heavy vehicle movements.
- 36 As noted in the TAR, the increased HCV traffic movements discussed above are not anticipated to have significant increases in peak daily activity at the Hirini Street / SH35 Intersection. Further, the Project is not anticipated to have any significant effect on the peak hour of activity on any day.
- 37 The main effect on the intersection as a result of the increase traffic movements is likely to be on the shoulder periods on either side of the peak and on lower volume days where the Project will enable more log movement via the port (by achieving a higher daily average).
- 38 Potential for capacity effects to arise at the Hirini Street / SH35 Intersection as a result of the above increased in HCVs is discussed at paragraphs 54 -59 of the JWS. By way of summary, the JWS notes the following:
- 38.1 The existing capacity constraints at the Hirini Street / SH35 intersection are not considered to be a reason to refuse resource consent for the Project as traffic associated with it is unlikely to exacerbate existing peak hour conditions.
- 38.2 Any future upgrade of the SH35 / Hirini Street intersection should be designed to allow for future capacity and road safety needs. Section 9.2 and Table 8 of the TAR and the DBC demonstrate that either a signalised 't-intersection' or roundabout intersection would be suitable to address the existing operating issues and would also accommodate future Port traffic demands.
- 39 I agree with the above conclusions of the JWS and TAR.
- 40 As outlined in the JWS, there were some minor differences of opinion between the experts in relation to:
- 40.1 The ability of the Port to increase traffic demand as of right under their existing consents. In this regard I note my understanding that neither the Tairāwhiti Resource Management Plan (*TRMP*), nor the Port's existing consents impose any limit on vehicle movements to or from the Port, as is discussed in Ms Georgina McPherson's evidence. Consequently, the Port would in any event be able to increase traffic movements as of right;

- 40.2 The degree to which there could be traffic effects arising from increased Port operations without the Project in place; and
- 40.3 That there may be an increase in traffic demands as a result of the Project during peak times (noting that in any event all the experts agree that any such impact would be modest and may not be noticeable in terms of daily variation).
- 41 In my opinion, these matters warrant further detailed consideration. I understand from Mr Bayley that some efficiency in Port activities could be achieved within 1 year with the capital dredging of Wharf 7. I also understand from Mr Bayley that there is potential to complete the second berth aspect of the Project within 3 years, i.e. by the end 2026. I have therefore considered 2024 and 2026 as my assessment cases and I have considered the following matters in detail:
- 41.1 The degree of change in hourly traffic demands;
- 41.2 The degree of change in daily traffic demands; and
- 41.3 Whether an increase in the number of peak activity days per year lies outside the existing daily variation in traffic demands.

Hourly Traffic Changes

- 42 To make an assessment of the contribution of the Project's additional HCV vehicle movements to hourly traffic volumes at the Hirini Street /SH35 intersection, I have:
- 42.1 assumed for simplicity that all existing HCV traffic on Hirini Street is related to operation of the Port. Although, that in practice this will not be the case.
- 42.2 applied the HCV traffic volumes and ATC surveys from the TAR¹⁷ which demonstrate:
- (a) a daily range of HCV traffic volumes of between 460 HCV per day to 1,175 HCV per day,
- (b) an average HCV volume of 703 HCV per day in the August count and 1,030 HCV per day in the November count.
- 43 HCV traffic volumes on Hirini Street are some 1,250 per day when the Port is operating at peak demand (i.e. handling some 16,500m³ of logs per day), and around 800HCV movements per day (or 70 HCV per hour) when operating at average demands (i.e. handling

¹⁷ Section 5.3 of the TAR discusses automatic traffic counts (ATC) undertaken in November 2019 and August 2020.

10,300m³ of logs per day).¹⁸ Allowing for the actual number of HCVs to be half the observed number of movements (as each HCV will make a trip to and from the Port), this equates to a typical load capacity of some 25.75m³ – 26.4m³ per HCV. Which I have rounded to 26m³ for simplicity.

- 44 As outlined above, the daily average cart in log volume is expected to increase from some 10,300m³ to some 13,900m³ once the second berth is fully operational. Based on discussions with Mr Bayley, I have assumed that 15% of the overall increases in Port operations will be feasible by 2024. This equates to an additional 540m³ of logs being hauled to Port on average per day. Given the average load of 26m³ per HCV, to meet this level of demand an average increase of 21 HCV loads per average day (i.e. 42 HCV movements) in the proxy scenario.
- 45 Considering the pattern of daily HCV volumes shown in Figure 5 of the JWS, and assuming a typical 12 hour working day, this equates to approximately 3-4 HCV movements extra per hour on the average day in the proxy scenario. It also results in an expected overall total increase of 23 HCV trips per hour by the time peak logging and export is reached (i.e. 138 additional loads per day and 276 additional HCV movements per day).
- 46 In assessing the potential effect that this change in HCV traffic would create at the SH35 / Hirini Street intersection, I have considered the turning count survey undertaken on Thursday 3 September 2020 and as factored to allow for converting the observed traffic volumes to typical fifth busiest week for the year, seasonal variation and annual growth in the Section 92 Response. I assess that the total AM peak hour traffic volume through the intersection is around 1,788vph. Adding 3 - 4 HCV movements per hour to this traffic volume represents around 0.1722% level of change in the peak hour. Considering the off-peak hour as the worst-case scenario i.e when the level of change will be higher due to existing traffic demands being lower, 3 -4 HCV being added to a total traffic volume of 1,477vph represents a 0.27% level of change.
- 47 Assuming peak logging and export capacity is reached in 2026, the anticipated 23 HCV movements per hour represents some 1.3% and 1.6% increase in peak and off-peak period traffic demands through the intersection respectively. If background traffic growth is taken into account at 1.3% per annum, the hourly cumulative increase in HCV traffic volumes reduces to 1.2% in the peak and 1.5% in the typical off-peak periods. In my opinion, this clearly demonstrates that the likely change in traffic volumes on SH35 regardless resulting from the project would be negligible. The level of change in traffic volumes that would be expected to occur as a result of the Project by 2030 are minimal and it is unlikely that there would be

¹⁸ TAR, Section 8.5.

any experiential change for drivers using the Hirini Street / SH35 intersection in any given hour of the day.

Daily Traffic Changes

- 48 As discussed above in greater detail in relation to effects related to light vehicles, the Project's expected increase in staff traffic demands have been assessed as being some 103vpd.¹⁹
- 49 When added to the annual change in HCV traffic of some 40 HCV per day for the proxy scenario assessed above, this results in a total daily change of 143vpd through the Hirini Street / SH35 intersection (assuming, conservatively, that the full complement of additional staff would be on site at that point).
- 50 As outlined in Appendix B, the 2022 daily traffic demand on SH35 was 20,232vpd. Therefore, a 143vpd increase in traffic volumes represents a 0.7% increase in the existing daily traffic volumes.
- 51 By 2026, applying 1.3% annual growth to traffic volumes on SH35 leads to a 2026 background traffic volume of 21,294vpd. This is an overall change of 3.9% between present day traffic demand and future traffic volumes on SH35, without any growth in activity at the Port. As outlined above the 2026 Port traffic demands are anticipated to have increased by 103vpd for staff and 276HCV movements per day i.e. a total of 380vpd by 2026, as a result of the Project. This represents a 1.8% increase in traffic volumes through the intersection at 2026. The increase in HCV traffic volumes related to the Project at 2026 are comparable with around 1.4 years' of standard yearly traffic growth on SH35 and are significantly less than the existing daily variation in traffic volumes.

More Busy Days

- 52 I have also considered the effect of having more 'busy' days in the context of the difference between existing average and the 16,500m³ maximum log cart in day. The current average day sees 800 HCV movements per day on Hirini Street with the 'busy' day representing 1,250 HCV movements per day.
- 53 I have identified earlier that the standard deviation in existing traffic volumes on SH35 is 2,034vpd. The level of change between current average and peak day HCV activity is 450 HCV and represents only around 1/5 to 1/4 of the day-to-day variation in traffic demands. If staff traffic is allowed for as well as HCVs, the future 'busy' day traffic volumes would be some 554vpd, which is around ¼ of the standard deviation.
- 54 In my opinion, this increase in the number of busy days per year that could arise either through increased Port efficiencies or better weather conditions, or as a result of the Project lie well within the

¹⁹ TAR, Section 8.3.

range of existing daily variation in traffic volumes on SH35 and as such, do not constitute an effect.

Effects of Intersection Upgrade Delays

- 55 As set out in paragraph 28 of the JWS, a Detailed Business Case (DBC) for the Hirini Street / SH35 intersection was prepared in 2017. The purpose of a DBC is to provide a clear outline of the problems that are driving the need for investment, the anticipated benefits of the investment, what options are available to deliver the benefits, and identification of a preferred solution. The DBC identified that an upgrade of the SH35 / Hirini Street intersection was required and that an 11m roundabout was the preferred option.
- 56 In my opinion, preparation of a DBC represents acknowledgement by WK and the road controlling authority that an upgrade of the Hirini Street / SH35 intersection on road safety and capacity grounds was necessary and that this need was recognised in 2017.
- 57 I have considered the effect that general traffic growth has had on intersection operation as demonstrated by the delay in right and left turning vehicles to SH35 from Hirini Street when intersection capacity has been tested using SIDRA. The outputs from this analysis are included as **Appendix C**. I have considered SH35 traffic growth effects on the operation of the intersection in 2% increments which is approximately 1.5 years' of growth, for expediency. The change in modelled turning delay over time is shown in **Figure 5**.

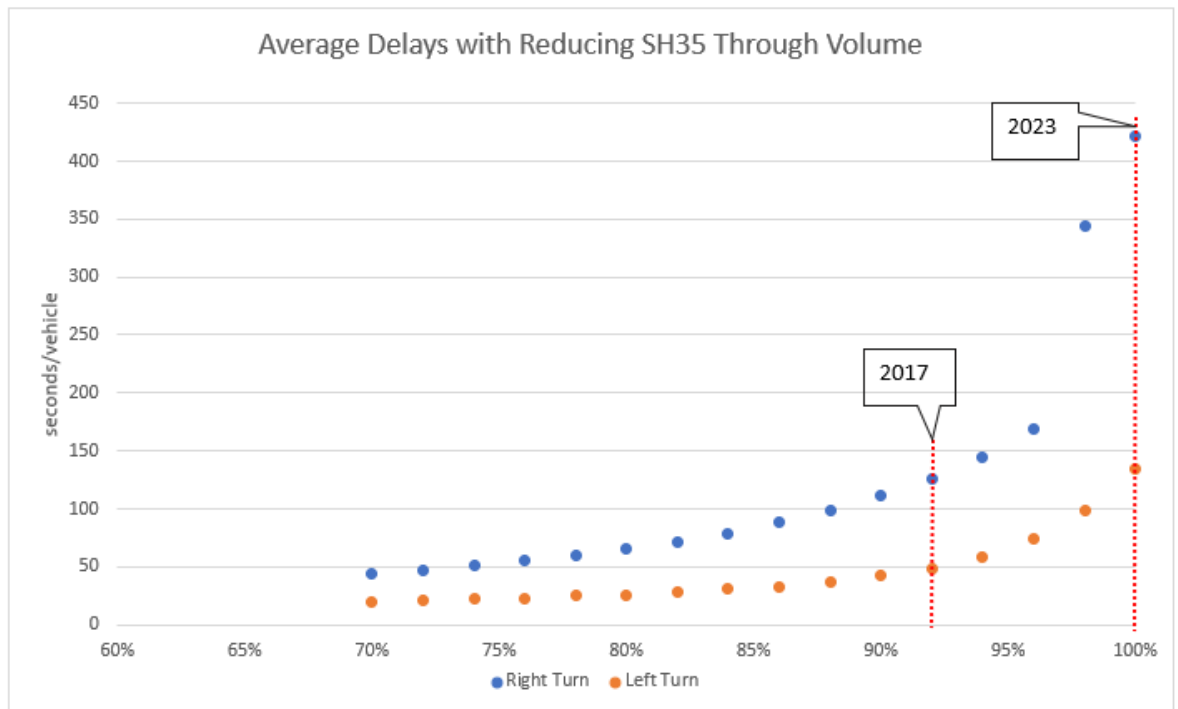


Figure 5: Average Turning Vehicle Delays with Reducing SH35 Traffic Demands over Time

- 58 Taking 100% traffic demand at the right-hand side of Figure 5 as representing existing traffic use of the intersection, the situation in 2017 is represented by 6 years' worth of demand reduction. This is also the point at which the left turn out of Hirini Street would have been operating at what is generally recognised to be an acceptable level of service (i.e. a 50 second delay i.e. at 92% of current demands). For the right turn out, a 24% decrease in SH35 traffic volumes would be needed to reach a typically acceptable level of service. This suggests that the intersection would have been experiencing capacity constraint well in advance of the 2017 DBC.
- 59 I note that, as discussed in Section 9.2 of the TAR, the delays from the SIDRA analysis presented in Figure 2 take no account of current road user behaviour which is enabling a reverse priority i.e. people on SH35 letting in traffic from Hirini Street, and that the level of delay identified in the SIDRA analysis is unlikely to be experienced in real terms.
- 60 Notwithstanding that, in my opinion, Figure 5 clearly demonstrates that the general growth in traffic over time has had an effect on the operational capacity of the SH35 / Hirini Street intersection which outstrips the expected degree of change likely to arise as a result of the Project. It is my opinion that if the intersection had been upgraded in accordance with the RLTP timeframes for delivery during the 2021/22–2024/5 financial years, the intersection upgrade would now be nearing completion, in advance of delivery of the Project.
- Potential for future intersection upgrade**
- 61 As per the JWS, WK has allocated funding for minor safety improvement works at the SH35/Hirini Street intersection for 2024.
- 62 In the longer term, there is also widespread agreement between traffic experts, including WK's own representative, as to that nature of appropriate improvements - being either the signalisation of the intersection or the installation of a roundabout.²⁰
- 63 In the event that WK has implemented an improvement consistent with the expectations of the experts, there is also widespread agreement that the improved intersection would comfortably service expected growth as well as the traffic movements associated with the Project.
- 64 As such, it is my opinion based on the above that:
- 64.1 the Project does not have an effect on the operation of the intersection that requires mitigation; and

²⁰ See TAR, Section 9.2 and Table 8, and JWS, Paragraph 60.

64.2 In any event, the effectiveness of any future intersection improvements by WK will not be adversely impacted by the Project.

SH35/Hirini Street Intersection Effects Conclusion

65 In terms of whether the expected level of change associated with the Project constitutes an effect that requires mitigation, I consider that it is relevant to consider the scale of the level of change and also the starting point for that level of change:

65.1 Scale of change: As I have demonstrated above, the expected increase in traffic associated with the Project is minimal in any given hour and also across the day, and I do not consider the impact of the Project will have any experiential impact on the intersection level of service.

65.2 Starting point: I have also discussed earlier that the operation of this intersection is degraded and that the poor level of service is long standing, having been identified in the 2017 DBC and expected to have been the for some time prior. The degree of change relating to the growth in traffic which has occurred during the delay in implementing the intersection upgrades exceeds the negligible effects of the Project.

66 In these circumstances I do not consider the level of effect requires mitigation.

Road Safety Effects

67 There are two principal areas of interest with respect to the Project's effects on road safety; the Hirini Street / SH35 intersection and the Crawford Road / Hirini Street intersection.

Hirini St/SH35 Intersection

68 As discussed earlier, the effect of the Project traffic on the traffic volumes using this intersection is likely to be 0.22% in the peak hour and 0.27% in the off-peak period. This is a negligible level of change and in my opinion, is unlikely to be the driver experience of this part of the road network. Based on the crash estimation models in Appendix B, it is clear that the degree of change in 2026 between the with and without development scenarios is 0.011 injury crashes per year. This equates to 1 additional predicted injury crash every 90 years. Given the intersection is experiencing approximately double the expected injury crash rate, this predicted increase due to traffic associated with the Project would be 1 additional crash every 45 years as injury crashes are occurring around twice as frequently as would be expected. In my opinion, this is a less than minor level of change.

69 In terms of managing existing and future safety effects at the Hirini Street / SH35 intersection, the experts agreed at paragraph 60 of the JWS that any future intersection upgrade ought to be designed

to meet future demands so that it can operate safely and efficiently. It was also agreed as per paragraph 59 of the JWS that any interim minor safety works at the intersection are the responsibility of GDC and/or WK.

70 I agree with the conclusions of the JWS.

Crawford Road / Hirini St Intersection

71 The existing operation of this intersection is operating slightly better than expected in terms of injury crash rates. The degree of change anticipated as a result of increased traffic associated with the Project is 0.005 injury crashes per year. This equates to 1 additional injury crash every 200 years. I consider that the effects on road safety at this intersection are likely to be negligible.

72 Road safety effects at the Crawford Road / Hirini Street intersection and Hirini Street pedestrian crossing have been discussed at paragraphs 63–66 of the JWS. All experts agree that:

72.1 Potential safety upgrades to the pedestrian crossing are supported;

72.2 There are a range of contributing factors to be considered associated with any upgrade of the pedestrian crossing facilities, with it being recognised that the Project is not the sole driver behind the need for upgrades; and

72.3 The form of the existing pedestrian crossings does not preclude the Project being approved.

73 I agree with the conclusions of the JWS.

74 I also note that subsequent to the completion of the JWS, the Commissioner recommendation²¹ in relation to the notice of requirement for the Te Kura Kaupapa Māori of Te Horouta Wānanga (*Kura*) located on Crawford Road included a Travel Plan condition.²² This included consultation with stakeholders including WK, Eastland and GDC in drafting the Travel Plan, monitoring the degree of use of the crossing by children attending the Kura, and consulting with key stakeholders in relation to any updates to the Travel Plan following completion of the monitoring.

75 The proposed OTMP and associated consent condition proposed as part of this Application provides for a similar degree of stakeholder communication. The OTMP will be a 'living document' that can respond to changes to the transport environment – including subsequent upgrades. In my opinion, the actual type of safety

²¹ Commissioner Twigley Recommendation dated 23 August 2023.

²² Condition 10.

upgrades undertaken by GDC at the Hirini Street crossing can therefore be readily accommodated in the OTMP.

- 76 Given the function of the Hirini Street / Rakaiatane Road / Kaiti Beach Road corridor as a freight route does not change as a result of the Project, I consider the effects on road safety to be less than minor overall.

Road Safety Effects Conclusion

- 77 I conclude that the Project is likely to result in less than minor road safety effects given:

77.1 The Project is likely to increase the injury crash rate at the SH35/Hirini Street intersection by 1 additional incident every 45 years;

77.2 The Project is likely to increase the injury crash rate at the Hirini Street/Crawford Road intersection by 1 additional incident every 200 years;

77.3 The function of the Hirini Street/Rakaiatane Road/Kaiti Beach Road corridor as a freight route does not change as a result of the Project; and

77.4 The OTMP provides a suitable consultation framework as a 'living document' to enable responses to changes as the transport network evolves over time – including as a result of future road upgrades.

Road Maintenance Effects

- 78 The anticipated road maintenance effects are as outlined in the JWS in paragraphs 67–69. Notably, the experts agree that:

78.1 The Hirini Street / Rakaiatane Street/ Kaiti Beach Road corridor was upgraded to a heavy duty structural asphalt pavement in mid-2019. I also note that, this supports the use of this road by HCVs, as required under the GDC Bylaw identifying this corridor as a freight route.

78.2 The change HCV movements which are expected based on the projected future log volumes is unlikely to significantly affect the long-term maintenance of the Hirini Street / Rakaiatane Street/ Kaiti Beach Road corridor.

- 79 I agree with the conclusions of the JWS.

- 80 Summary of the project's construction transport effects The AEE identifies a potential peak construction traffic demand of 16HCV per hour and 150HCV per day, subject to the final design and construction methodology of the Project.

81 As set out at paragraphs 70–71 of the JWS, all experts agree that adopting a CTMP prior to construction of the Project is an appropriate mechanism to mitigate and manage construction traffic effects.

82 I agree with the conclusions of the JWS.

TRANSPORT ISSUES RAISED IN SUBMISSIONS

83 I have read all the submissions lodged on the Project that raise issues about transport effects and note that only Geraldine Oliver (received 30 September 2022), Gillian Ward / Rail Action Group (received 20 October 2022), Grant Vincent / Forest & Bird (received 27 October 2023) and Winston Moreton (received 26 October 2022) raised concerns in relation to traffic matters.

84 The submission from WK is supportive in part, and suggested that Eastland address matters via consent conditions.

85 Given the high degree of overlap in matters raised by submitters, I have generally responded by topic, with the exception of WK, which I address specifically.

Use of Rail (Geraldine Oliver, Gillian Ward / Rail Action Group, Winston Moreton, Grant Vincent / Forest & Bird)

86 These submissions raise concerns that rail has not been appropriately considered, and discuss the preference to reopen the rail route linking Gisborne and Napier, along with the potential development of a multimodal freight hub at Matawhero and the use of rail to access the Port itself. I understand that Mr Bayley's evidence addresses the alternative options considered when determining the Project to be the preferred option to support future Port activities.

87 My understanding of the locations of forest areas that use the Port to export logs, is that reopening the rail route and/or utilising the freight hub more extensively would be unlikely to have a significant effect on road traffic volumes as the logs still need to be hauled from forest to wherever they are stored, be it at Matawhero, or the Port itself. If the existing rail sidings were to be used as an alternative, either to serve a reopened Gisborne – Napier rail line or to shunt to the Port, then the logs being brought from the forest to these sidings would use the same road network as logs being carried to the Port would use. Accordingly, there is unlikely to be any reduction in log-export related traffic on SH35 within the urban area of Gisborne as a result of using the existing rail siding.

88 I also note the comments made by Mr Whittaker in relation to the uncertainty in reopening of rail services given the substantial costs involved. As such, the use of rail seems unlikely to be a valid option at this time.

Effects of traffic on CBD and Residential Areas (Geraldine Oliver, Gillian Ward/ Rail Action Group, Grant Vincent / Forest & Bird, Winston Moreton)

- 89 The submitters have raised concerns that the additional HCVs carrying logs to the Port will have an unspecified detrimental effect on the CBD, and will have noise and air quality effects on residential areas. These concerns were raised both generally and in relation to Ormond Road specifically.
- 90 I note that SH35 does not pass directly through the main CBD area, with only a short section to the west of the bridge within the CBD area. The remainder of SH35 passes through industrial and residential areas.
- 91 I have previously outlined the level of change in traffic volumes that could reasonably be expected to occur on SH35 through the increased export capacity that the Project would support. Whilst I acknowledge the sensitivity of increasing traffic in residential areas that SH35 passes through, it is my opinion that the level of change as a result of the Project is minimal, well within the day-to-day variation in existing traffic volumes, and that any resulting traffic effects would also be minimal.
- 92 I also note that one of the functions of the State Highway network is to carry freight. Increasing road freight associated with operation of the Port is therefore in alignment with the function of SH35.
- 93 In relation to Ormond Road, I note that it is recognised as a freight route under the GDC Resolution under clause 20 of the Traffic and Parking Bylaw 2021 (JWS Figure 2). The resolution prevents HCVs from using other roads in the central Gisborne area.
- 94 In any event, as with SH35, the expected change in traffic demands is likely to be minimal overall and well within the capacity of Ormond Road. The increase in HCV traffic along an identified freight route, is also, in my opinion, in alignment with the expected function of that road.

Waka Kotahi

- 95 WK's submission is supportive of the Project's expansion of the Port, while raising potential mitigation measures and areas of further investigation. Since WK's submission was lodged, Eastland has worked closely with WK in relation to both aspects of its submission, as evidenced by the considerable levels of agreement reflected in the JWS between myself and Mr Connelly.
- 96 The key mitigation points raised in the WK submission relate to:
- 96.1 Suggesting inclusion of a consent condition including the promotion of more sustainable travel;

- 96.2 Suggesting inclusion of a consent condition requiring end of trip facilities for pedestrians and cyclists and safe and convenient access to the port site for walking and cycling;
- 96.3 Further consideration of the existing walking, cycling and public transport networks to ensure appropriate facilities are provided and/or suggestion of inclusion of a consent condition requiring upgrades to existing walking, cycling and public transport infrastructure to support mode shift;
- 96.4 Suggesting inclusion of a consent condition requiring construction traffic effects on pedestrians and cyclists to be minimised, and for a CTMP to be developed with WK and GDC; and
- 96.5 Suggesting inclusion of a condition of consent requiring the development of an agreed strategy for efficiency and safety upgrades on SH35 between the bridge²³ and Crawford Road, and/or the imposition of an OTMP developed with GDC and WK and revised every three years with provision for monitoring and reflecting the general intent to avoid adverse effects and address mitigation measures.
- 97 In response to the above points, I note the following:
- 97.1 A draft consent condition has been offered in relation to development an OTMP which includes measures to promote sustainable and active travel options. Notwithstanding my opinion that there are no traffic effects that warrant mitigation, the OTMP will provide for collaboration between GDC, WK and Eastland (which has to date been positive) and will also enable the interim implementation of mitigation measures to support a safe and efficient transport network, within the constraints of the existing and anticipated non-Project related pressures. In my opinion, this addresses points 1 and 2 of the submission (as listed above), noting that showers and changing rooms area already available on site.
- 97.2 In relation to the third submission point, the TAR at Section 3.6 covers the existing walking and cycling infrastructure in the area. Paragraphs 61–62 of the JWS also identify that all experts agree that the adoption of an OTMP is appropriate and should be required as a consent condition. I further consider that the current level of walking and cycling infrastructure provision is not a bar to consent being granted, and that the OTMP will assist in encouraging more active

²³ I understand that the bridge referenced related to the bridge that carries SH35 over the Turanganui River.

travel. As such, it is my opinion that point 3 has been addressed.

97.3 Submission point 4 in relation to the need for a CTMP has also been addressed through the proposed consent conditions and I also note that the experts agreed that this appropriate mechanism could be governed by standard consent conditions.²⁴

97.4 In relation to submission point 5 above, I have demonstrated that the effects of the Project on the operation of the SH35 / Hirini Street intersection in terms of capacity are negligible and in terms of safety are less than minor, with the Project being likely to have an effect at full capacity generally in keeping with 1.4 year's worth of background traffic growth. I have also demonstrated that the increase in average daily traffic demands at future peak log handling capacity lies within the range of the current day to day variation in daily traffic volumes at this intersection. All the experts agree in paragraph 37 of the JWS that there is currently a lack of clear way forward for funding and delivery of transport infrastructure upgrades at the Hirini Street / SH35 intersection but that the existing capacity issues at the existing Hirini Street / SH35 intersection are not a reason to deny resource consent. I also consider that this lack of funding for intersection upgrades should also not be a bar to resource consent being granted.

97.5 Notwithstanding the above, I consider Eastland's proposed draft consent Condition 76 will provide for opportunity to review options to minimise HCV traffic effects through measures such as access instructions to haulage firms, recognising that these operate independently to the Port. In my opinion, this addresses the final submission point made by WK.

RESPONSE TO THE OFFICER'S REPORT

98 I have read the Council's Officer's Report prepared by Mr Todd Whittaker on behalf of GDC dated 25 September 2023 and the Brief of Evidence prepared by Mr Chris Rossiter and appended as Appendix 4 of the Officer's Report. I generally agree with the conclusions of the Officer's Report in relation to transportation with the exception of the following:

98.1 In his discussion on the funding of SH35 / Hirini Street intersection upgrades Mr Whittaker²⁵ alludes to Eastland contributing to this upgrade. As discussed earlier, the 2017

²⁴ JWS, Paragraphs 70 – 71.

²⁵ Council Officer's Report, paragraph 143.

DBC identified this intersection as operating poorly, with capacity issues likely to have been evident well in advance of this time. The DBC identified a roundabout upgrade option that if implemented, would have improved intersection operations significantly, regardless of the Project. Mr Rossiter agrees with this.²⁶ Putting this aside, I have assessed that the degree of change in peak hour traffic demands as a result of the Project would be some 0.27% which in my opinion is negligible and is not a level of effect that requires specific consideration of mitigation.

98.2 Mr Rossiter confirms that his key area of concern is in relation to the increase in 'busy days' that might occur at the SH35/ Hirini Street intersection as a result of the Project.²⁷ I have addressed this at some length earlier and in my opinion, the change in average daily traffic volumes once peak log handling capacity has been reached represents a 1.8% change in daily traffic volumes, compared to the day to day variation of +/- 9.6%. I consider that the effect of this change will have a negligible effect on driver experience on the network and on intersection capacity.

98.3 In terms of whether the increase in traffic demand at the SH35 / Hirini Street intersection would result in an increase in crashes, I predict this to be 1 injury crash every 45 years, when taking into account the existing poor performance of the intersection. Whilst I agree with Mr Rossiter²⁸ that this does represent an increase, I consider the degree of change to have a less than minor effect on road safety.

98.4 In relation to the OTMP, I have addressed this above and consider it will provide adequate opportunities to minimise the operational traffic effects of the activity on the surrounding area as part of a living document that is updated as the traffic environment is upgraded. Whilst not wholly agreeing with Mr Rossiter that there are operational traffic effects that require mitigation, I do agree that consent conditions requiring an OTMP and CTMP are appropriate and provide opportunities for consultation with GDC and WK to provide for coordination of traffic movements and construction activities (the Project and SH35 / Hirini Street intersection).

COMMENTS ON THE DRAFT CONDITIONS

99 In my opinion the draft consent conditions 51 and 52 relating to the provision of a CTMP and as appended to Ms McPherson's evidence

²⁶ Council Officer's Report, Appendix 4 - Mr Rossiter , paragraph 4.7.

²⁷ Mr Rossiter, aragraphs 3.4 and 5.2.

²⁸ Mr Rossiter , paragraph 5.3.

are appropriate to manage the traffic effects of the Project during the construction period. I also consider these Conditions to be consistent with the outcome of the JWS and sufficient to address the matters raised by WK in their submission.

- 100 In my opinion the draft consent Conditions 75 and 76 relating to the provision of an OTMP and as appended to Ms Georgina McPherson's evidence are also appropriate.
- 101 I consider these conditions, and compliance with them, to appropriately manage the operational traffic effects of the Project. I also consider that the conditions as drafted cover the matter raised by WK in its submission. In particular, Condition 75 will provide for the collaboration on long term strategic decisions related to the roading network.

CONCLUSIONS

- 102 In my view the Project's operational traffic effects do not constitute an effect that requires avoidance, mitigation or remediation.
- 103 I assess that the effect of the Project at peak log export capacity of 4.2m tonnes per annum on the operation of the SH35 / Hirini Street intersection is of a similar scale to the effects of 1.4 year's traffic growth at current 1.3% growth rates. I also consider that the delay in delivering the SH35 / Hirini Street intersection upgrade by the road controlling authorities has had a greater detrimental effect on the operation of the intersection than the Project would at its expected future operational capacity.
- 104 Notwithstanding that, I support the adoption of an OTMP through the draft consent conditions included in Ms McPherson's evidence and consider that this will provide an appropriate mechanism to support interim intersection improvements as might be expected to be delivered based on the WK minor safety works funding for 2024.
- 105 I consider that the expected construction traffic effects are likely to be less than minor and can be appropriately managed through the adoption of the CTMP as is common practice. I consider that the draft consent conditions included in Ms McPherson's evidence provide sufficient control to mitigate the traffic effects that may arise.

- 106 Overall, it is my opinion that there is no traffic or transportation reasons why resource consent for the Project should not be granted.

Judith Makinson
3 October 2023

APPENDIX A: JWS

In the Matter of:

The Resource Management Act
1991

and

In the Matter of:

Resource consent for second
berth at Gisborne Harbour

Application By:

Eastland Port Limited

Joint Witness Statement - Transportation

CKL

Telephone: +64-7-849-9921

E-Mail: Judith.makinson@ckl.co.nz

1 September 2023

Introduction

1. The following is the Joint Witness Statement (JWS) prepared by Transportation experts through voluntary and informal meetings, with the main discussions being held between Monday 7th August 2023 , Friday 11th August and Tuesday 29th August 2023.
2. The participants listed in Annexure A agree that:
 - (i) The Environment Court Practice Note 2023 provides relevant guidance as to the purpose and nature of the JWS;
 - (ii) They will comply with the relevant provision of the Environment Court Practice Note 2023;
 - (iii) They will make themselves available to the Panel; and
 - (iv) This JWS is to be filed with the Panel.
3. All experts agree that the area of potential traffic and transportation effects arising from the proposal is broadly contained within the Hirini Street / SH35 and Hirni Street / Crawford Road intersections, the Hirini Street / Rakiatane Road / Kaiti Beach Road corridor and the first 100m of Crawford Road to the east of Hirini Street.
4. This JWS covers the following topics:
 - (i) Information forming the basis of assessment:
 - Existing transport networks
 - Existing Road Hierarchy and Function
 - Existing Network Operations
 - Existing Road Safety
 - Road Upgrade Funding
 - Port Traffic Demands

- (ii) Matters of discussion arising from Submissions.

Information Forming the Basis of Assessment

Existing Transport Networks

5. All experts agree with the description of the existing transport networks included in Section of the Integrated Transportation Assessment (“ITA”) prepared by East Cape Consulting (“ECC”) dated 11 August 2022. The site location (outlined in red), surrounding road network are shown in Figure 1. Aerial images of key locations features described in the following sections are provided in Annexure B.

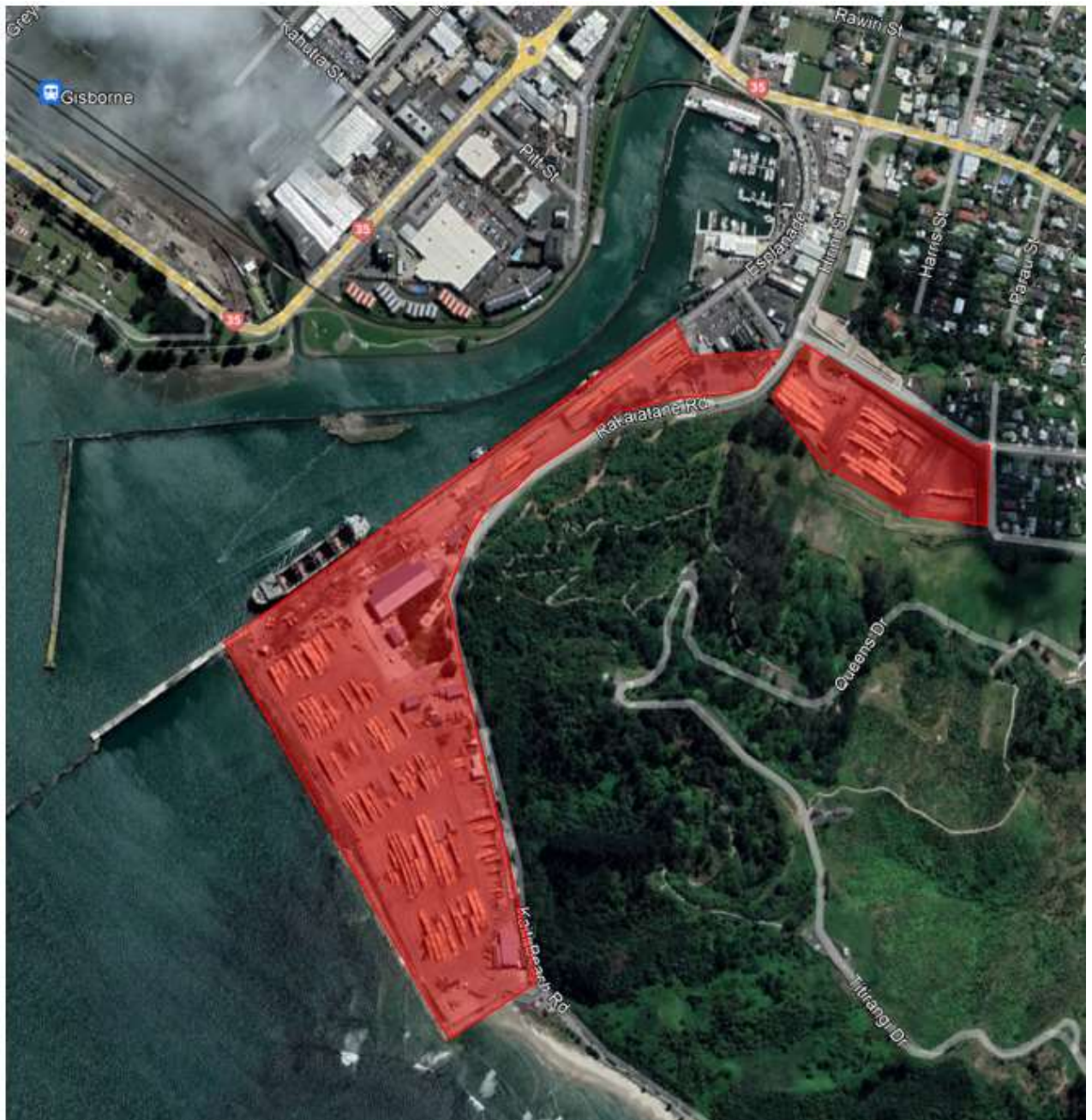


Figure 1: Site Location and Road Network

6. The key points of section 3.4 and 3.6 of the ITA in relation to the road network, intersections and walking and cycling network are:
- (i) Road access to the site is from Kaiti Beach Road, Rakaiatane Road, Hirini Street and SH35 Wainui Road (“SH35”).
 - (ii) The speed limit on Kaiti Beach Road, Rakaiatane Road, Hirini Street and SH35 Wainui Road (in its urban context) is 50km/h. The average operating speed is

around 45km/h – 47km/h and the 85th percentile speed is around 52km/h – 53km/h. This information is from the 2019 / 2020 automatic traffic counts located 70m north of Crawford Road and prior to traffic calming being installed in late 2021.

- (iii) Whilst there is some variation on overall form, in the vicinity of the SH35 / Hirini intersection, SH35 Wainui Road is a 14m wide 2-lane road with a 3m wide flush median. There are shoulders to both sides with on-street parking allowed in some areas. There are footpaths on both sides of the road but no marked cycle lanes in the vicinity of Hirini Street.
- (iv) Hirini Street is 290m long and runs between SH35 Wainui Road and Crawford Road. It is a 12m wide 2-lane road centreline and edge lines defining 3.5m wide traffic lanes. On-street parking is generally permitted and there is a foot path on the east side of the road. This crosses to the west side of the road at a formal crossing point just north of Crawford Road. Based on aerial photography, this was installed by Gisborne District Council (GDC) late 2021 as part of the Crawford Road cycle path. Additional red surfacing was applied to the crossing in early to mid 2022. Speed humps are also present to either side of this crossing.
- (v) Rakaiatane Road is 470m long. It has an 11m wide road with centreline and edgeline markings defining 3.5m wide traffic lanes. On-street parking is prohibited. There is a shared path on the west side of the road and speed humps are also present. A mid-block crossing to the Titirangi Reserve is provided. There is a second, informal crossing point just north of the Cook Memorial which links the road footpath with the pathways in the Titirangi Reserve. This means that pedestrians no longer need to walk down the carriageway of Rakaiatane Road to travel south past the port.
- (vi) Kaiti Beach Road is a continuation of Rakaiatane Road. On-street parking is generally prohibited except for indented parking bays. Speed bumps are present at intervals in the carriageway. Some 9 or 10 dwellings, the foreshore and the Gisborne Yacht Club are accessed south of the Port. The footpath in the Titirangi Reserve rejoins Kaiti Beach Road at its southern end, where a pedestrian crossing point is in place.

- (vii) Crawford Road runs generally east/west between Hirini Street and SH35 as it heads southeast, away from the Gisborne CBD. Crawford Road is some 11.8m wide. It has centreline and edgeline markings defining 3.1m wide traffic lanes. A dedicated two-way cycle path was completed along Crawford Road late in 2021 as set out earlier. The upper log yard, fuel stop and trailer lift are located at the west end of Crawford Road, near the intersection with Hirini Street.
- (viii) The Hirini Street / Crawford Road intersection is a give-way controlled priority-t intersection with no marked turning lanes, although the Crawford Road approach is wide enough to allow for vehicles to wait alongside each other at the limit line.
- (ix) The SH35 Wainui Street / Hirini Street intersection is a stop-controlled t-intersection. Formal left and right turn lanes are provided on SH35 Wainui Road and Hirini Street is wide enough at the limit line for left and right turning vehicles to wait alongside each other.

Existing Road Hierarchy and Function

7. A Network Operating Framework (“NOF”) is a mechanism to consider the wider function of the road network and take a whole of system approach to management, and assign different user group priorities to different roads. As an example, GDC may consider that roads in the town centre should have a pedestrian focus and that matters of traffic capacity are subservient to that.
8. GDC has confirmed that their NOF project is currently unfunded.
9. We understand that the draft One Network Framework (“ONF”) categorises Crawford Road, Hirini Street / Rakaiatane Road / Kaiti Beach Road as local streets.
10. Resolution 20 of the GDC traffic and parking bylaw update of 2021 restricts HCVs traversing Gisborne to SH35, Ormond Road, Esplanade, Hirini Street, Rakaiatane Road and Kaiti Beach Road. An extract from Table 13 confirming the HCV routes is provided in Figure 2.

Table 13 : Resolutions concerning the control of vehicles on roads under clause 20 of the Traffic and Parking Bylaw 2021	
Res ID#	Resolution
14.1	The following resolution is made under clause 20 of the Tairāwhiti Traffic and Parking Bylaw 2021, without the prior written consent of Council the transport of stock in a heavy motor vehicle on urban roads, except on arterial routes as defined in the Tairāwhiti Resource Management Plan, is prohibited.
14.2	The following resolution is made under clause 20 of the Tairāwhiti Traffic and Parking Bylaw 2021, without the prior written consent of Council, heavy vehicles transiting the Gisborne city urban area are restricted to State Highway 35 and Ormond Road, Esplanade, Hirini Street, Rakaiatane Road and Kaiti Beach Road, as indicated in figure 14.2.1 forming part of the resolution.

Figure 14.2.1: Resolution 14.2 - Heavy vehicle route restrictions

Figure 2: HCV Access Route Resolution

11. We have reviewed the draft ONF classifications in terms of both 'place and movement. Extracts from the ONF guidelines are provided in Annexure C for ease of reference. We consider that the following provides a more holistic representation of road characteristics and classifications, based on the function of the roads, recorded traffic volumes and our experience of them:
 - (i) Hirini Street / Rakaiatane Road / Katia Beach Road is assessed as having a P4 place function. The August 2020 traffic shows that Hirini Street currently carries some 5,000 vehicles per day (“vpd”) of which 13% - 21% are heavy commercial vehicles (“HCVs”). Rakaiatane Road currently carries some 2,600vpd of which 16% are HCVs. Given traffic is likely to increase over time, this places the corridor in the M3 movement function category. We conclude that Hirini Street / Rakaiatane Road / Katia Beach Road operates as an urban connector under the ONF, particularly given its identification as a freight route and providing the only road access to the Port.

(ii) Crawford Road currently carries some 2,200vpd with minimal HCV traffic. This reflects its residential nature. We consider it has an M4 movement function (300vpd – 4,000vpd) and a P4 place function. We agree that Crawford Road operates as a local street under the ONF.

(iii) SH35 currently carries some 21,000vpd. We consider that SH35 has a P4 place function and M1 movement function, placing this in the urban connector category.

12. The existing traffic volumes on SH35 and Hirini Street / Rakaiatane Road / Kaiti Beach Road corridor include existing port operations.

13. Weekday peak hour traffic volumes on Hirini Street are in the region of 400– 430 vehicles per hour (“vph”). Figure 29 of the ITA shows the hourly traffic patterns on Hirini Street based on a count undertaken in August 2020. The split between light vehicles and HCVs within the daily traffic profile is shown in Figure 30 of the ITA. These have been updated in Figures 3 to 5 below to show not only average daily flow profiles but also the maximum and minimum observed daily traffic demands.

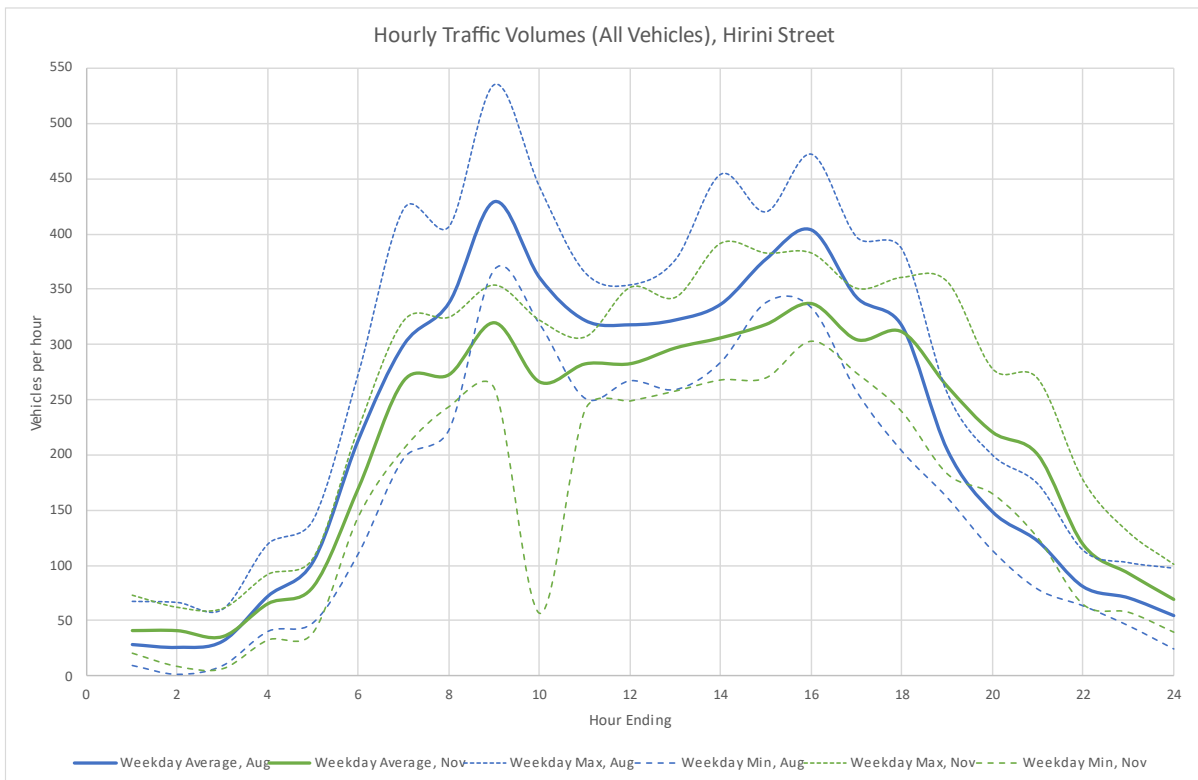


Figure 3: Hirini Street Daily Weekday Traffic Volume Profiles

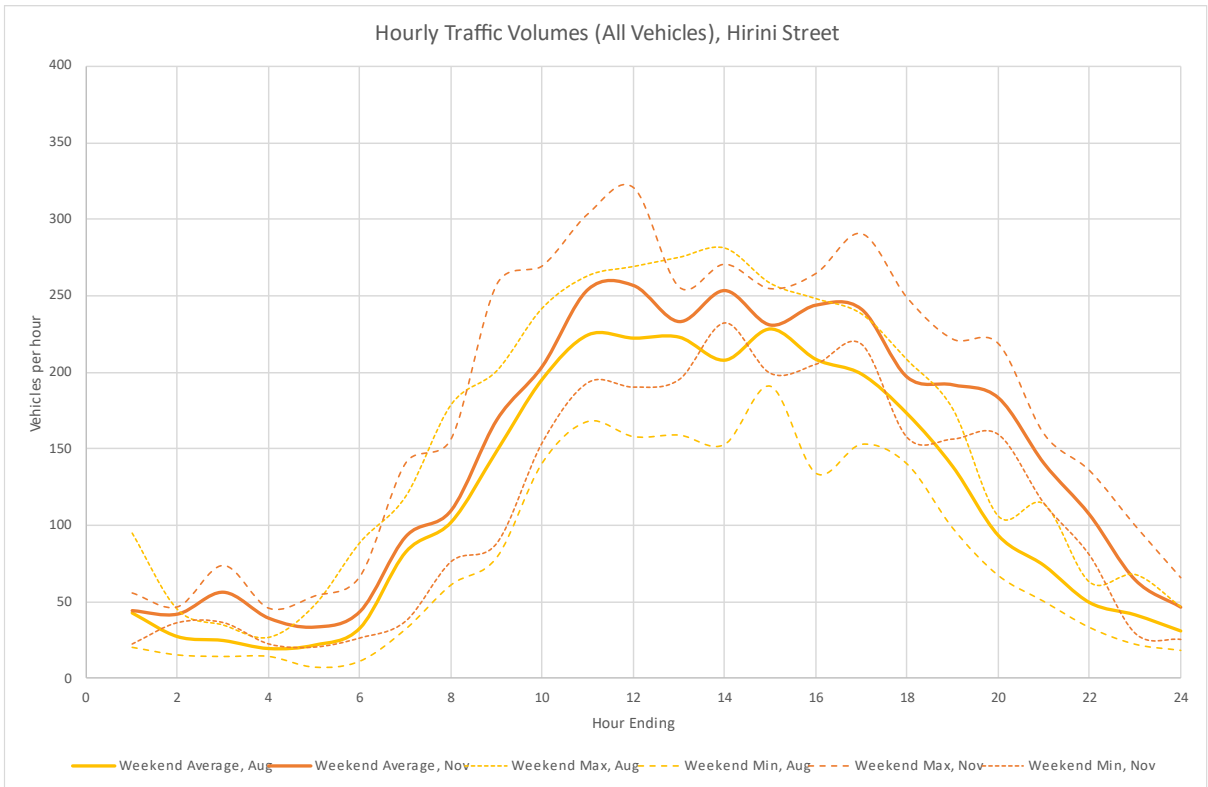


Figure 4: Hirini Street Daily Weekend Traffic Volume Profiles

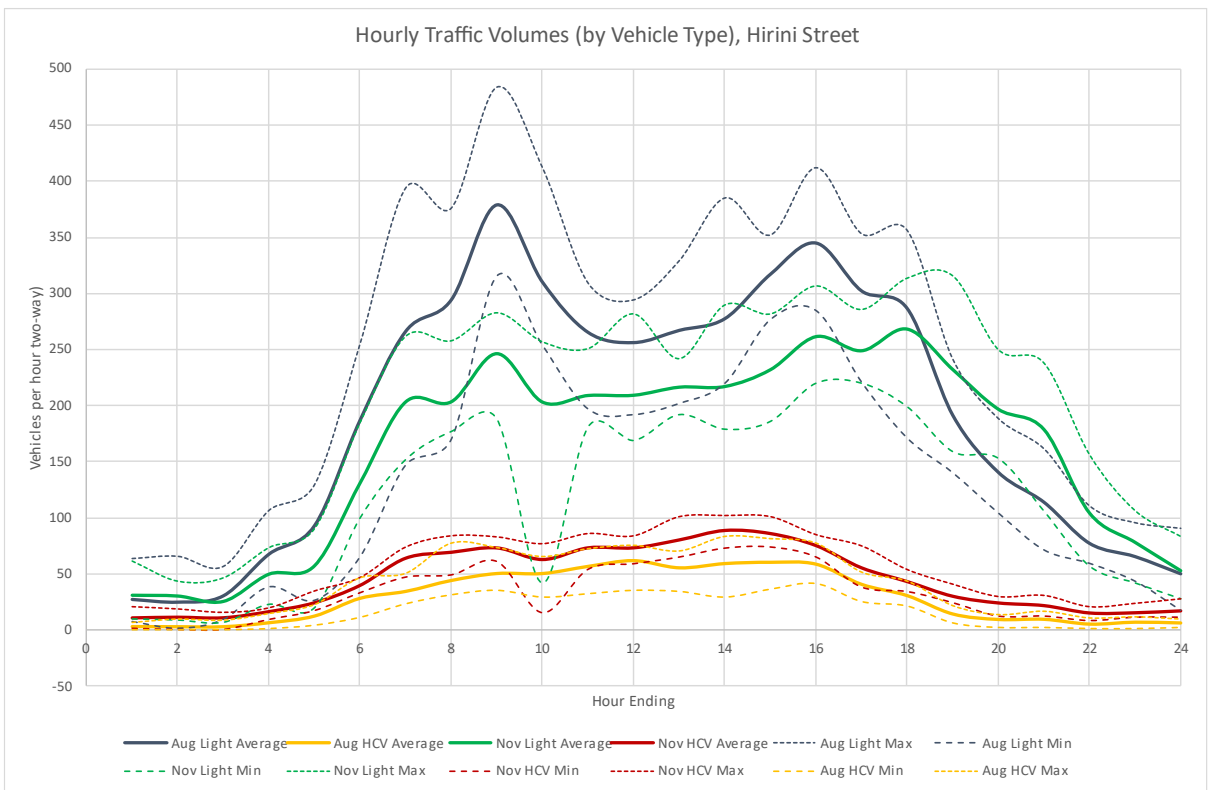


Figure 5: Hirini Street Daily Traffic Volume Profiles by Vehicle Type

14. The fluctuation in traffic volumes across the day and pronounced peaks are predominantly influenced by light vehicles, with HCVs representing a generally steady rate of demand between 7am and 4pm.
15. The s92 response from ECC to GDC confirmed that the survey data was not affected by Covid 19. This is confirmed in Figure 1 of that document which is reproduced below as Figure 6 for ease of reference.

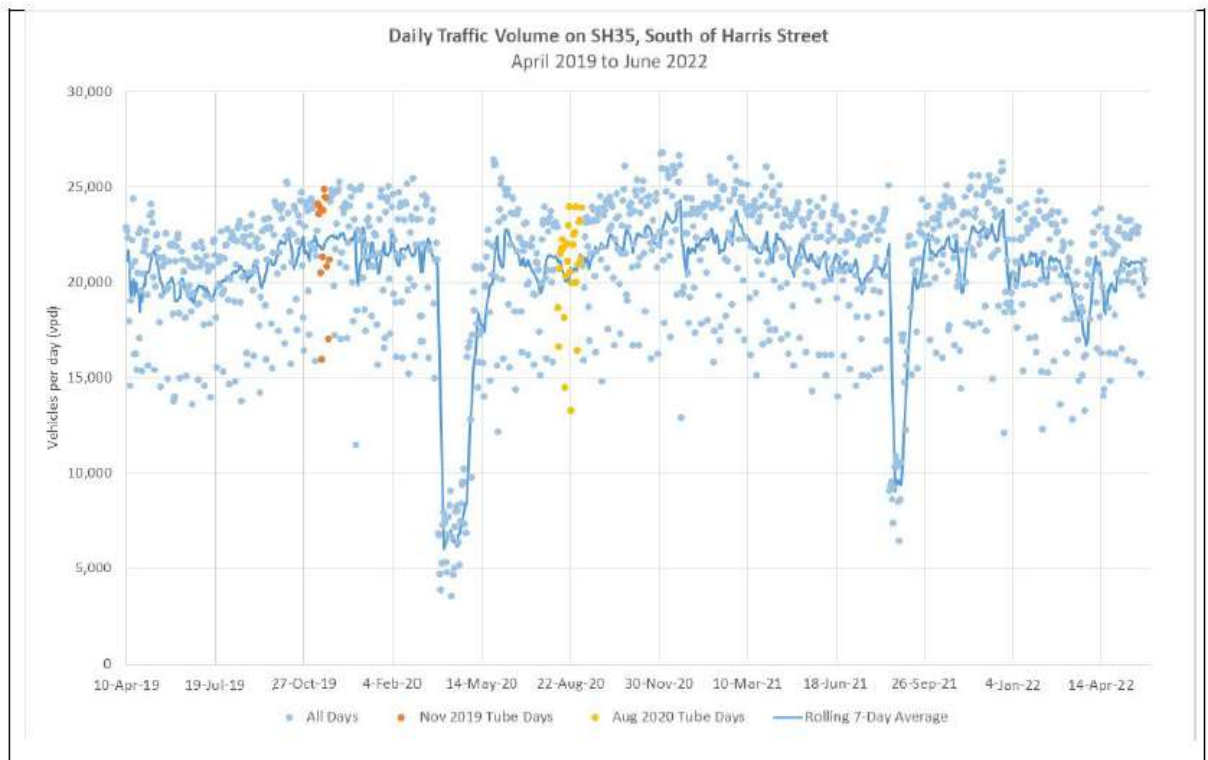


Figure 6: SH35 Traffic Volumes August 2019 to April 2022

16. The experts agree that the above information provides a suitable basis for assessment of traffic effects which may arise from the application.

Existing Network Capacity

17. As set out in Section 6.2 of the ITA and subsequent analysis in the s92 response, the SH35 / Hirini Street intersection currently operates at a poor level of service (“LOS”) at peak times. At peak commuter times, right turns into and out of Hirini Street are constrained with there being few gaps in oncoming traffic to facilitate right turn manoeuvres. Right turns in to Hirni Street are generally enabled by westbound drivers purposefully slowing down to create a gap to allow a vehicle to turn right.

18. The intersection operates at LOS E or worse from 8.30am – 9.45am and noon – 6.30pm.
19. The pattern of intersection performance is shown in Figure 38 of the ITA and replicated below as Figure 7 for ease of reference.

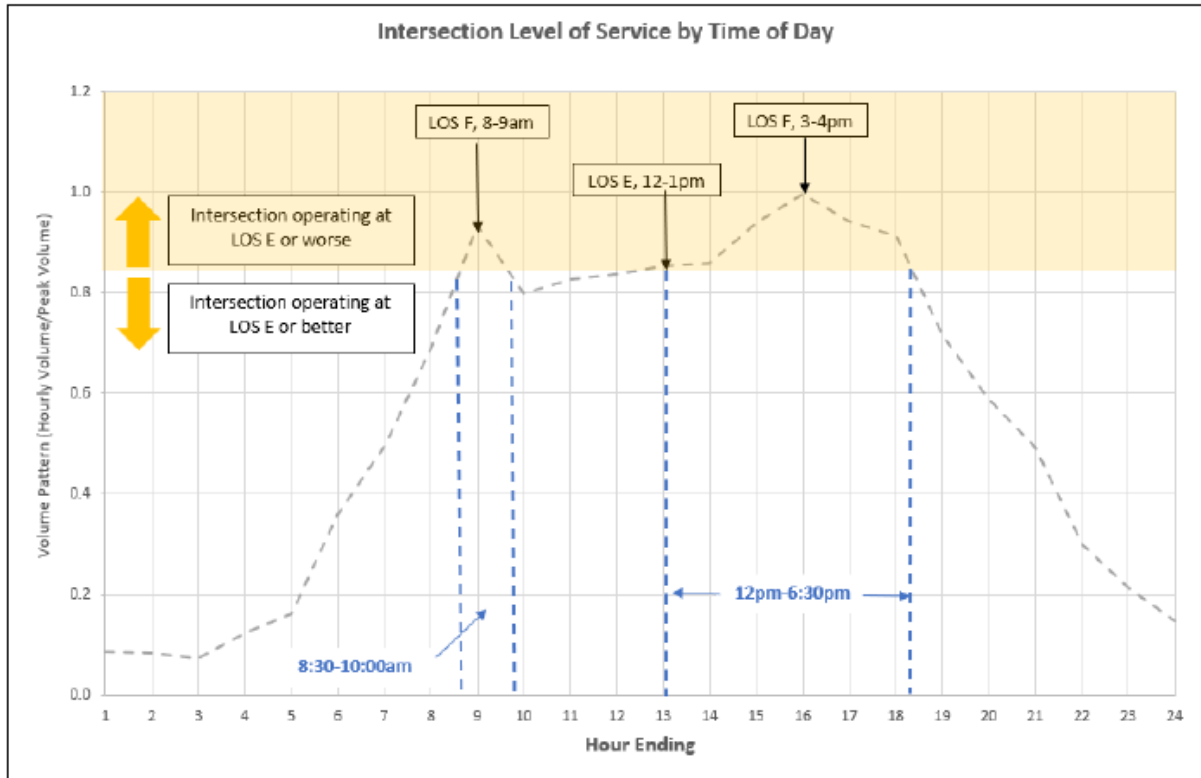


Figure 7: Hirini Street / SH35 Intersection Operation Profile (Typical Weekday)

20. There are no capacity concerns in relation to the operation of the Crawford Road / Hirini Street intersection.
21. The experts agree that this is a reasonable representation of existing intersection operations. We agree that the delays at the SH35 / Hirini St intersection are likely to be predominantly influenced by traffic demands on state highway.

Existing Road Safety

22. The existing 5-year crash record at the time of writing the ITA is presented in Section 6.1 of that document.
23. A review of the CAS database shows six crashes occurring in the vicinity the Hirini Street / SH35 intersection since the beginning of 2022. One of these was a serious injury crash

and involved a cyclist being hit by a car cutting through the gas station to avoid delays at the intersection.

24. There has also been a crash involving a cyclist at the Crawford Road / Hirini Street intersection. This occurred before the cycle path was installed. A logging truck was involved in the crash, but the crash did not occur through fault of the HCV driver.
25. Based on the models in the Waka Kotahi Crash Estimation Compendium (2018), the actual crash rate at the Hirini Street / SH35 intersection is higher than expected crash rate. In general, the crashes are low severity, resulting in minor or no injuries.
26. The experts agree that the number of crashes at the SH35 / Hirini Street is higher than might typically be expected based on the crash estimation models and that the crash outcomes are minor or non-injury crashes. We agree that this adds to the need for the existing poor capacity performance to be addressed.
27. The experts also agree that the recorded crashes at the Crawford Road / Hirini Street intersection are in line with crash estimation models.

Road Upgrade Funding & Future Network Management

28. A Detailed Business Case (“DBC”) 2017 identified an 11m roundabout at the SH35 / Hirini Street intersection as an option for fully upgrading the intersection. The aim was to improve movement in and out of Hirini Street whilst minimising delay to SH35. The roundabout was trialled successfully and was perceived to provide opportunities to improving walking and cycling facilities, and to be an enduring option.
29. The DBC recommended the property purchase, design and construction phases for the roundabout be deferred until the Network Operating Plan confirms whether there will be any changes to the current road network that could materially affect the scope of the preferred option.
30. It is understood that some affected landowners do not support the proposed roundabout without fully investigating potential alternative routes to the port.
31. The upgrade of the Hirini Street / SH35 intersection is listed as the fifth ranked priority project within *Regional Land Transport Plan Table 3: Regionally Significant Activities*, after

three walking / cycling projects and one other state highway project. An extract is provided as Figure 8.

Table 3-Regionally significant activities

Project	Owner	Description	Duration	Estimated Total Cost	Investment Priority	Priority Weight	Impact on priority (out of 5)	Overall Score (IP weight x contribution)	Total	Regional priority (RTC)	Waka Kotahi IPM priority
Taruheru River Walking and Cycling	GDC	Shared walking and cycling path along Taruheru River	2021/22 - 2024/25	\$7,422,442	Safety	50%	5	2.5	4.1	1	5
					Reliability	30%	2	0.6			
					Access	20%	5	1			
Campion to Makaraka Cycleway	GDC	Separated cycleway linking Makaraka to the city	2024/25 - 225/26	\$4,200,000	Safety	50%	5	2.5	4.1	1	6
					Reliability	30%	2	0.6			
					Access	20%	5	1			
Tairāwhiti Walking & Cycling Network	GDC	Develop and implement Tairāwhiti Walking & Cycling Network Plan	2021/22 - 2031/32	\$6,520,630	Safety	50%	4	2	3.6	2	6
					Reliability	30%	2	0.6			
					Access	20%	5	1			
SH2 Inter-regional connections (Wairoa Gorge)	WK	Safety and resilience corridor work to improve key journey between Gisborne and Opoiki	2021/22 - 2026/27	\$22,059,000	Safety	50%	4	2	3.4	3	4
					Reliability	30%	4	1.2			
					Access	20%	1	0.2			
Eastland Port Access	WK	Hirini Street intersection improvement	2021/22 - 2024/25	\$5,150,000	Safety	50%	3	1.5	3.2	4	3
					Reliability	30%	5	1.5			
					Access	20%	1	0.2			

Figure 8: Regional Land Transport Plan Funding Priorities

32. Waka Kotahi is identified as the project 'owner', with the estimated project duration being 2021/22 – 2024/25 at a cost of \$5.1m. This funding is on hold pending confirmation that any intersection works align strategically with the Network Operating Plan. This is currently unfunded. GDC have confirmed routes for heavy vehicles (Figure 2).
33. GDC has not identified the Hirini Street / SH35 intersection in their 2021 Development Contributions policy.
34. The Waka Kotahi Tairāwhiti resilience program will not be available until after the board ratifies its approval at their August meeting. At the time of preparing this JWS, none of the experts have seen this document.
35. Waka Kotahi has confirmed that the Hirini Street / SH35 intersection has been allocated funding under the Safety Improvement Programme for 2024. Interim improvements may be able to be made, such as improved markings, parking control, provision of cycle lanes, lower speeds, pram crossings and centre islands. Ideally these should be consistent with the future plans for the transport network.
36. There are no changes proposed in the State Highway Interim Speed Management Plan, thus any alteration to speed limit would need to be considered through the 2024-2027 Speed Management Plan.

37. The experts agree that there are existing capacity and safety concerns at the Hirini Street / SH35 intersection that need to be addressed, regardless of future port activities. They also agree that the funding allocation for completion of this work is currently unclear and there is no clear commitment to undertake the works in the near future.

Port Operations

38. It is understood by the transportation experts that the port is currently operated as efficiently as possible given the constraints of bringing ships into port in suitable weather and sea conditions, loading it as efficiently and safely as possible, storing logs within the on-site and remote log yards as efficiently and safely as possible, and the handling constraints of the site. It is our understanding that the practical cap of daily log handling is in the region of 16,500m³ and that this is based on the overall storage capacity and the on-site traffic management needed to safely and efficiently move logs on portside.
39. It is also understood by the experts that storage space is allocated to individual customers and that each customer will maximise the volume of logs stored on site in advance of a ship being expected in port. It is further understood that log storage does not typically get to zero i.e. each customer is continually bringing logs to port in keeping with the rate of felling and the rate of export.
40. Figure 20 of the ITA shows the daily log cart in volumes for a three-year period from 31 March 2019 to 10 April 2022. This is reproduced below as Figure 9 for ease of reference.

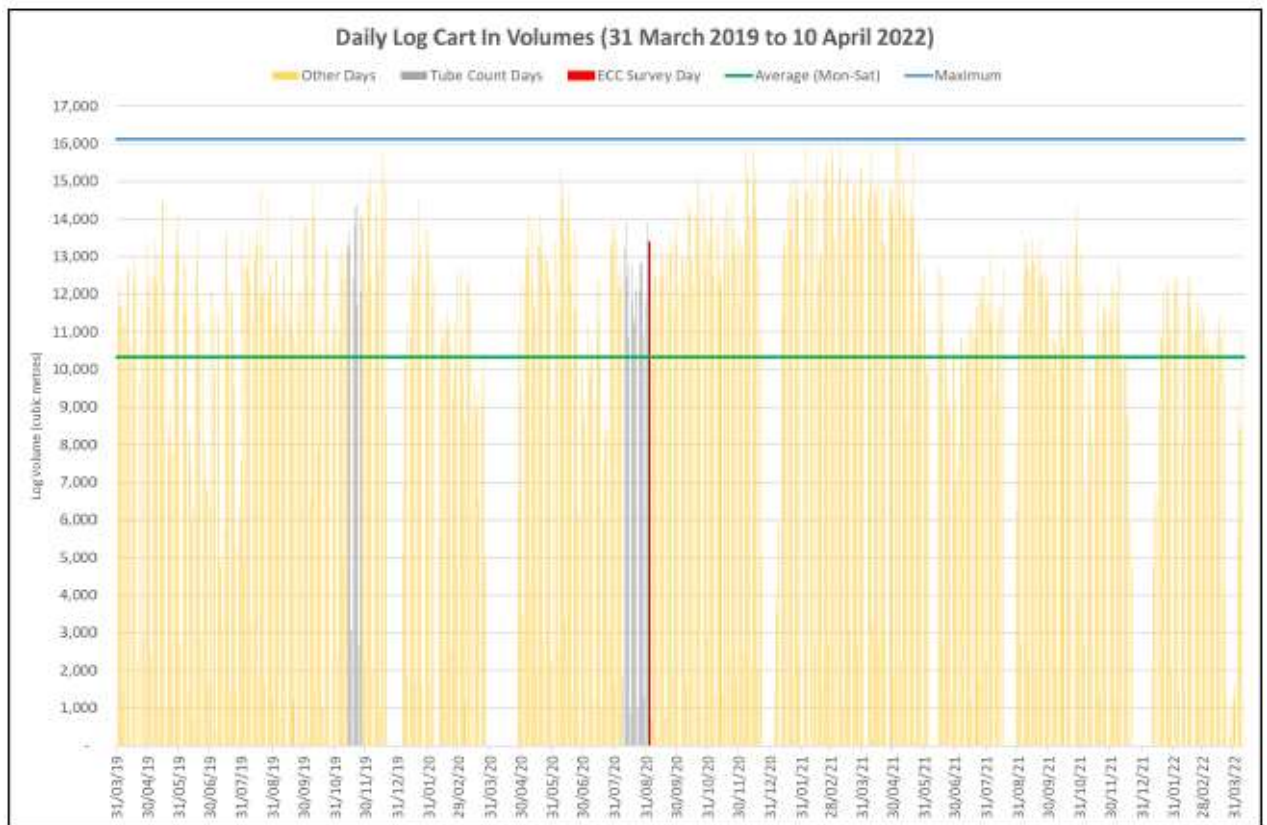


Figure 9: Daily Log Cart In Volumes 31 March 2019 – 10 April 2022

41. The horizontal blue line shows the peak daily handling volume of around 16,500m³, whilst the green horizontal line shows the average daily handling volume of some 10,300m³, excluding zero log days. The graph shows the effects of down time due to weather conditions. For example, for the year 10 April 2021 to 10 April 2022, log was carted into port on 244 days only due to weather constraints governing ship arrival and departure. There were around 5 – 10 days where peak log handling was achieved.
42. We understand from Eastland Port that by 2030, the annual volume of logs for export from the regional forests is expected to be 4.2million tonnes. If the existing profile of daily log cart in is increased to replicate existing operations based on only one berth at the port, it can be expected that the rate at which logs are hauled out of the forest will exceed the 16,500m³ peak efficiency operations at the Port. This is shown in Figure 10.

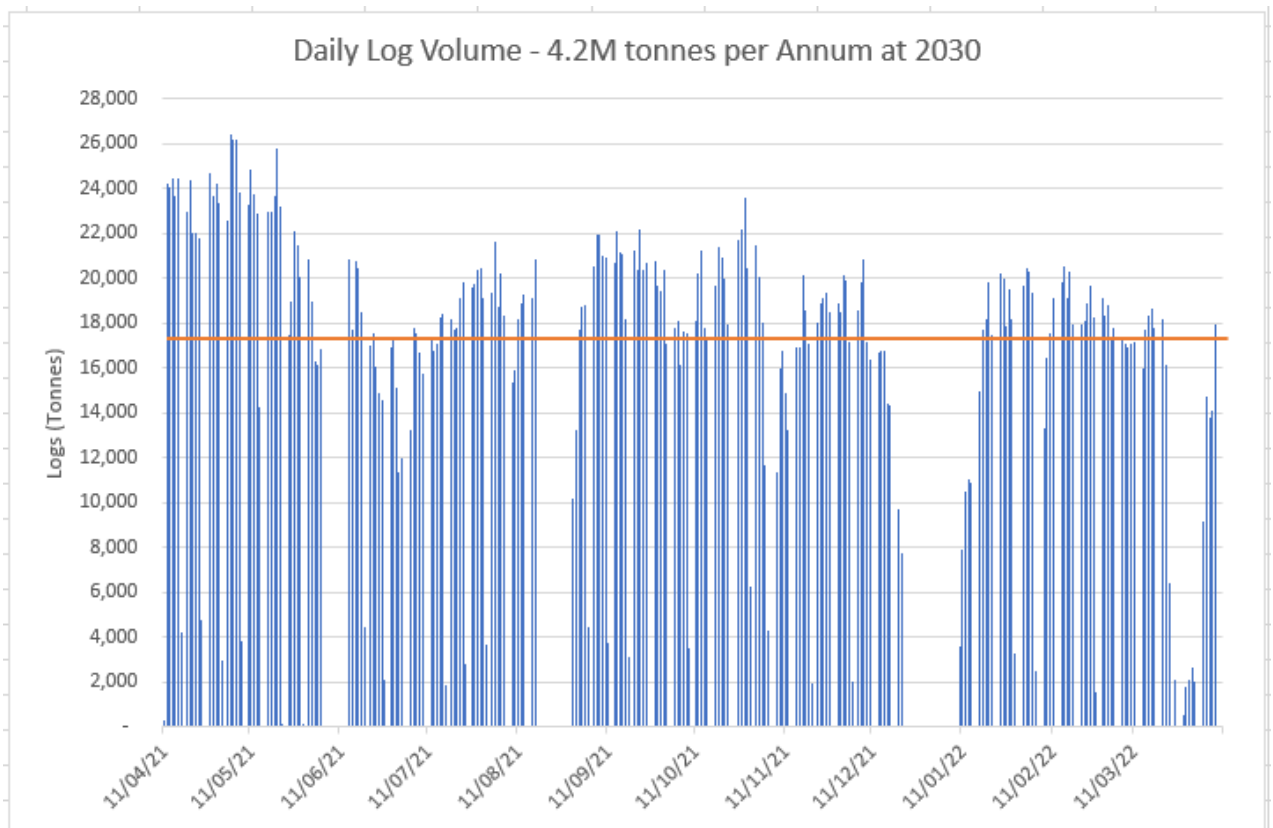


Figure 10: Future Daily Log Cart in Volumes - 4.2M Tonnes per Annum at 2030.

43. The red line on the graph represents the peak efficiency operations at the port. This shows that there would be a significant increase in days where peak log handling would be required at the port, to some 180 – 190 a year. Even at this rate of operation, it is unlikely that the port will be able to accommodate the volume of logs expected if existing operating conditions are continued i.e. one berth only. It is our understanding that if the capacity at the port cannot be increased, then harvesting in the forests would be constrained and the 4.2million tonnes anticipated volume of export would not occur and / or be deferred. It is our understanding that the economics of the industry would not support the additional costs of hauling logs to alternative ports.
44. In order to meet demand, the port will need to achieve peak operational capacity on more days per year and will need the second berth to do so. An assessment of the extent of change expected between existing number of peak operational days and the future need for peak operational days is shown in Figure 11. This is based on the port being able to work on 306 days per year (i.e. excluding Sunday's and statutory holidays).

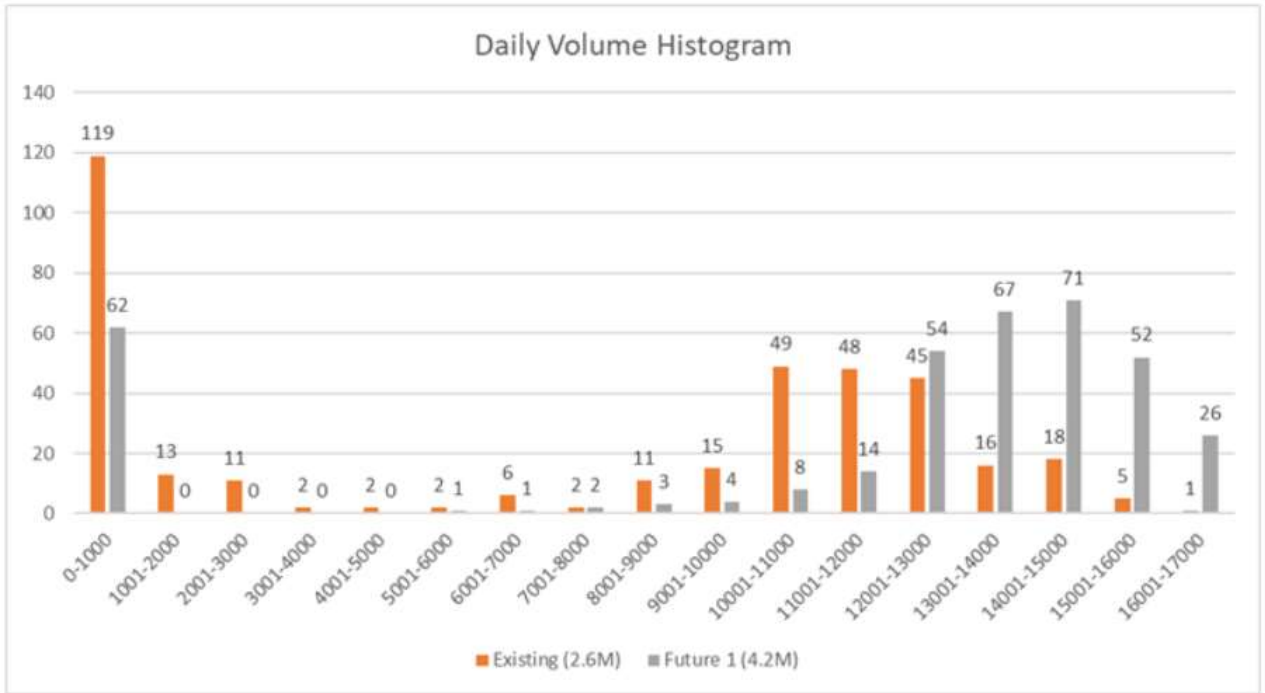


Figure 11: Existing 2.6m Tonne p/a v Future 4.2m Tonne p/a Port Operations

- 45. The horizontal scale represents the volume of logs handled at the port in cubic meters with the vertical scale representing the number of days that level of log handing is required in order to achieve a total 4.2m tonnes throughput.
- 46. To practically and economically achieve 306 working days per year, the second berth is required.
- 47. The experts understand that the second berth will reduce lost time between ships as a second ship can be in port whilst the first is being loaded. The experts also understand that the log handling capacity of the port means that two ships cannot be loaded at the same time; the aim of the project is to allow a more consistent level of activity and reduce the ‘peakiness’ of current operations.
- 48. In terms of staff related traffic demands, these are affected most by whether there is ship in port or not, as shown in Figures 22 and 23 of the ITA. These are replicated as Figures 12 and 13 for ease of reference.

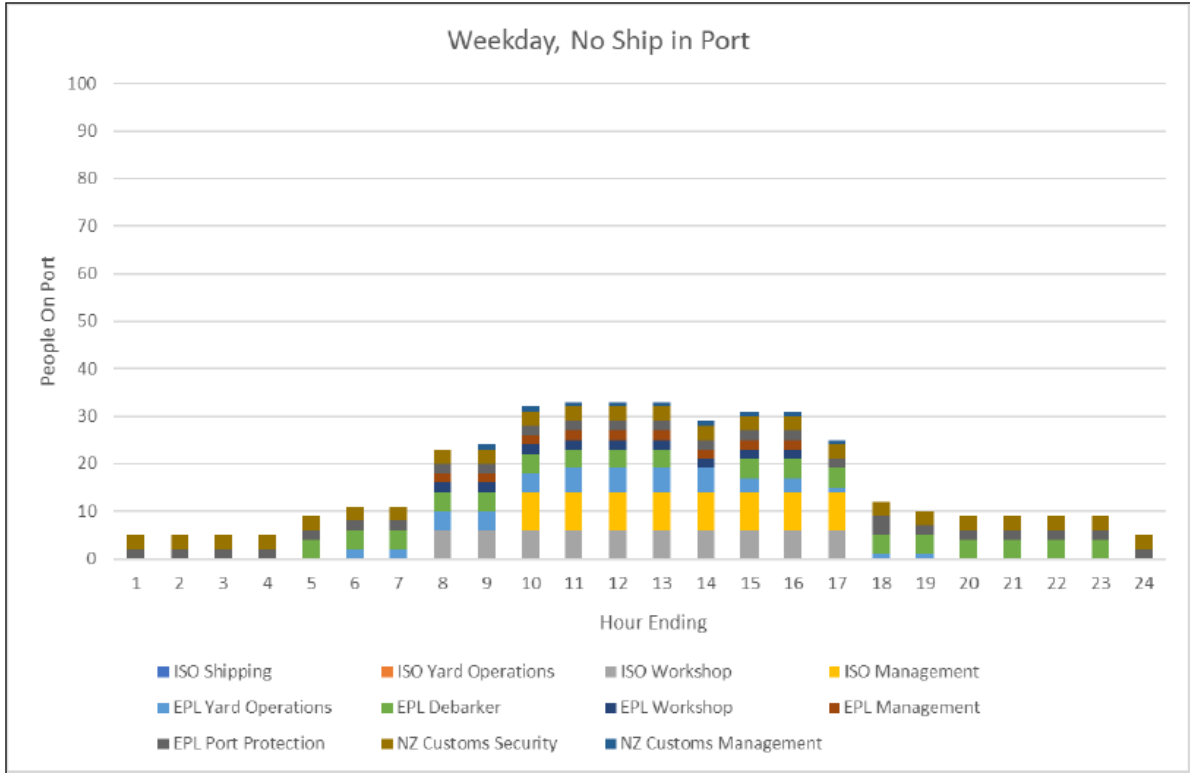


Figure 12: Weekday Staff Numbers on Site - No Ship

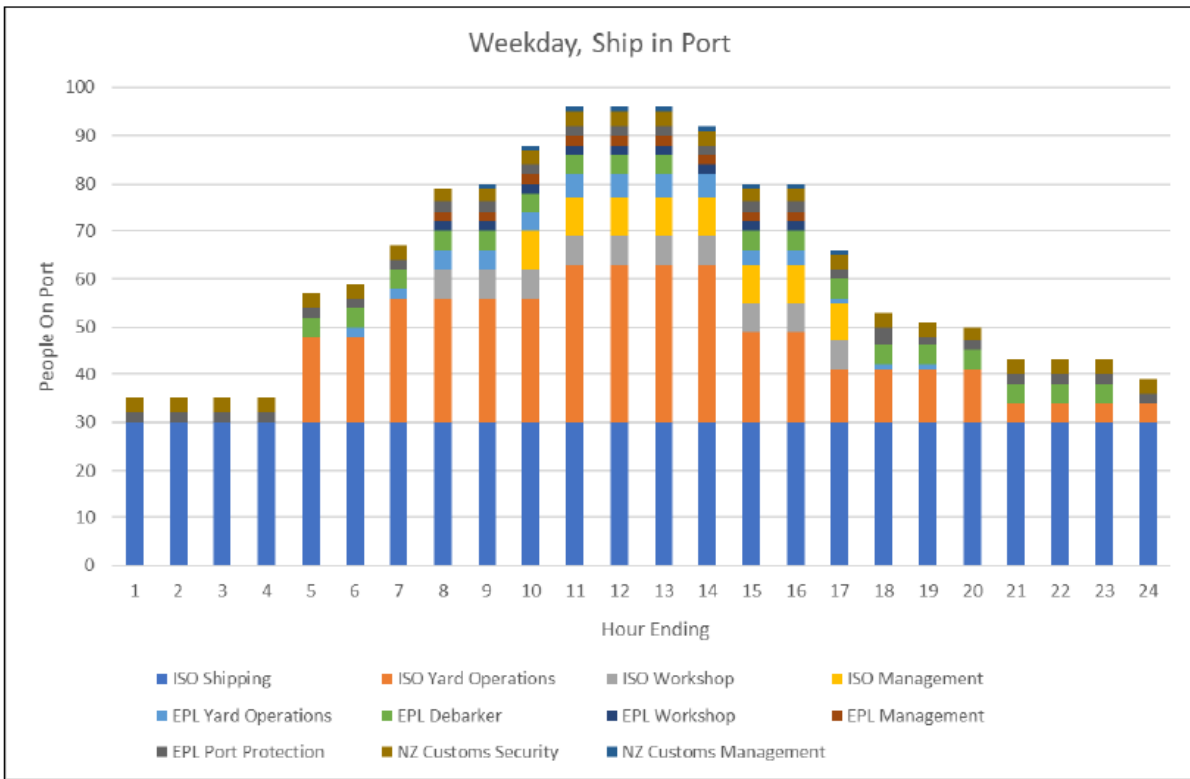


Figure 13: Weekday Staff Numbers on Site - Ship in Port

49. As discussed in section 8.3 of the ITA, the existing peak staff traffic movements occur at 6am – 7am and 6pm – 7pm, with a smaller peak in the middle of the day at around 2pm – 3pm as shifts change over.
50. The experts agree that these traffic movements fall outside of the existing network peak periods.
51. The increase in staff numbers is expected to be modest. The bulk of newly generated staff trips are expected to occur outside of the network peak hours as shown in Figure 40 of the ITA. This has been updated to show existing and future staff travel movement lines and is provided as Figure 14.

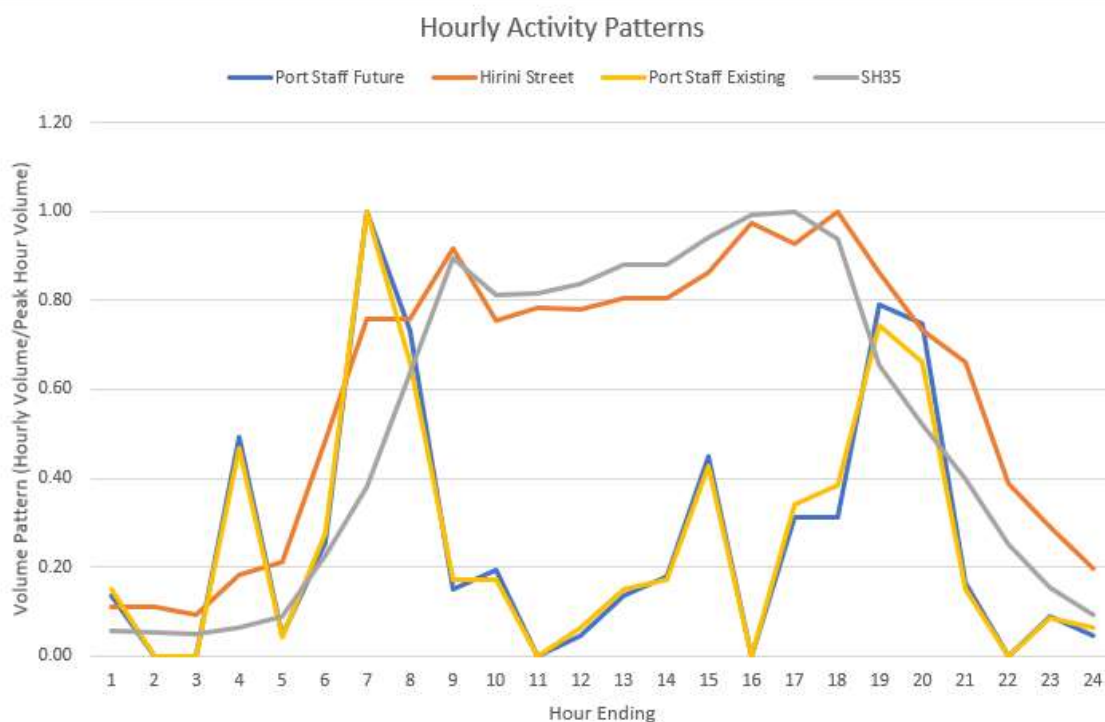


Figure 14: Future Staff Traffic Movement versus Network Peak Traffic Movements (Hirini Street / SH35 Intersection)

52. The experts therefore agree that the modest increase in staff is likely to have a small effect on the operation of the road network .

Draft Kei Tua

53. Kei Tua is a draft plan prepared by Eastland Port, showing their vision for future development of the inner harbour area. The experts accept EPLs advice that Kei Tua is currently on hold and the

timeframe for implementation is unknown. We have therefore placed no weight on the contents of Kei Tua in relation to our consideration of effects.

Matters of Discussion

Would the provision of the second berth have an effect on the operation of the Hirini Street / SH35 intersection in its current form compared to if no second berth was permitted?

54. The experts agree that the underlying driver for log movements is the harvesting of the forest, which is expected to increase to 4.2m tonnes per annum by 2030.
55. We are agreed that there would be an effect on the operation of the intersection if the Port could increase efficiency and ship access to the port without the second berth. Mr Rossiter and Ms Makinson are not aware of any constraints within the existing resource consents governing their activities and therefore this increase in traffic demand at the intersection could occur as of right. Mr Connelly has not had sight of previous resource consents at this stage. We are agreed that in order to meet the increased daily average demand for log volumes at the Port, HCV growth in the morning peak hour is likely to be associated with more trucks being run rather than the same number of trucks being able to make multiple runs. The Port is unlikely to be able to directly control this. It is more likely that logging / haulage firms will want to get more out of their existing vehicle fleet and operate more consistently rather than invest in more vehicles.
56. Mr Rossiter accepts that there could be an increase in daily average log cart from the existing 10,300m³ due to increased efficiencies at the port, such as improved ship access to the single berth, and that this could occur by right. He is of the view that if the port could handle a greater volume of logs on more days, then it would already be doing so or have plans in place to do so. The effect of the second berth will be to increase the average daily cart in volume towards 13,900m³ as an average. In Mr Rossiter's opinion, this means that due to the uncertainty around potential gains due to port efficiencies, the traffic effect at the intersection may be less than the absolute difference between existing and future traffic demands associated with the port i.e. there may be some small efficiencies to be had so the effect of the second berth may be less than difference between the two average volumes. The practical outcome is that the intersection will be operating under pressure more often and for longer periods during the day.

57. Ms Makinson holds similar opinions in terms of the change in traffic demand over time and how this is likely to affect intersection performance. However, she is of the opinion that the existing consents allow for the increase in demand and it is not the second berth per se that creates the effect, rather that it is the increase in forestry demand.
58. Mr Connelly agrees with Mr Rossiter that there would be higher volumes of traffic through the SH35 / Hirini St intersection on more days. He is of the view that there may be an increase in peak period traffic movements, but this would be modest and may not be noticeable in the normal variations in daily operations. Mr Rossiter and Ms Makinson agrees with this opinion in terms of daily variation.
59. We are agreed that the capacity issues at the existing SH35 / Hirini Street intersection are not a reason to deny resource consent as the proposal is unlikely to exacerbate existing peak hour conditions. From a safety perspective, we are agreed that interim minor safety works at the intersection are the responsibility of GDC and / or Waka Kotahi.

If funding was allocated for upgrading of the Hirini Street / SH35 intersection, would it be able to accommodate the expected future traffic demands, including increased HCV activity associated with the increase in export log volumes?

60. We are agreed that intersection upgrades should be designed to meet future demands so that it can operate safely and efficiently. We are agreed that either a roundabout or signalisation of the intersection can provide suitable capacity. We expect the final form of intersection will be subject to a decision led by Waka Kotahi as road controlling authority.

Would adopting an Operational Travel Demand Management Plan (“OTMP”) for HCVs and / or staff be an appropriate mitigation of traffic effects?

61. All experts agree that the OTMP as set out in Section 9.8 of the ITA is appropriate. However, subsequent information suggests that the ability of EPL to address the last bullet point, i.e. ‘*any other measures to minimise operational traffic effects of the activity on the surrounding area*’ are constrained but we understand that the Port is willing to engage actively with GDC and Waka Kotahi around this aspect.
62. All experts agree that, with the one proviso in mind, an OTMP should be required as a consent condition. We are also agreed that the OTMP should be a ‘live’ (i.e. subject to

regular review) document that supports the ongoing operation of the Port, and that it can be developed after consent has been granted. We agree that this should be developed and implemented within a 6 – 12 month timeframe of the consent being granted and that this can be addressed through consent conditions.

What are the road safety concerns at the Crawford Road / Hirini Street intersection and the Hirini Street pedestrian crossing and how can they be addressed?

63. The concern is the interaction of pedestrians and cyclists with heavy vehicles, on an urban connector road which is also an identified freight route and the only road access to the Port. We are agreed that there are safety improvement options available to improve safety, particularly at the Hirini Street pedestrian crossing, which could include speed management (e.g raised table), speed reduction (change in speed limit), signalisation of the crossing and / or grade separation.
64. Whilst recognising that grade separation would be the best road safety outcome, we agree that this is not practical in this location due to anticipated use, space and economic constraints .
65. As experts, we would support improvements to the crossing and recognise that there are a range of contributing factors to the need of any such upgrades, with increased traffic associated with the second berth not being the sole cause e.g. increased use by kura, students, increased numbers of pedestrians and cyclists due to mode shift policy responses.
66. We are therefore agreed that the existing pedestrian facilities are not a matter to oppose the application.

Is the increase in HCV traffic on Hirini Street / Rakaiatane Road / Kaiti Beach Road likely to have a negative effect on road maintenance?

67. We understand that the Hirini Street / Rakaiatane Street/ Kaiti Beach Road corridor was upgraded to a heavy duty structural asphalt pavement in mid-2019. Given its status as a freight route and the only means of road access to the Port, we consider that it is reasonable to expect that the pavement will have been suitably designed to meet the road's intended and known function.

68. We are all agreed that the change HCV movements which are expected based on the projected future log volumes is unlikely to significantly affect the long term maintenance of the Hirini Street / Rakaiatane Street/ Kaiti Beach Road corridor.
69. We agree that increased log haulage to the port will increase traffic movements at the Crawford Street / Hirini Street intersection and along approximately 140m – 150m of Crawford Street to access the Upper log yard, the fuel stop and trailer lift. We are agreed that this is unlikely to have a road maintenance impact of significance.

If consent for the second berth is granted, how can construction traffic effects associated with implementation of that consent be addressed?

70. The experts agree that a Construction Traffic Management Plan (“CTMP”) is an appropriate mechanism to mitigate and manage effects arising from temporary construction traffic activities, noting that temporary in this instance is likely to be over a several years.
71. We are all agreed that the preparation, contents and submission of the CTMP can be governed by standard consent conditions.

Annexure A – Parties to JWS

Name	Role	Party
Chris Rossiter	Principal Transportation Engineer (Stantec NZ)	Gisborne District Council
Glenn Connelly	Senior Safety Engineer	Waka Kotahi NZ Transport Agency
Judith Makinson	Director, CKL	Eastland Port Limited

Annexure B - Photographs of Key Locations

All images sourced from Tairawhiti Maps (2022) and reproduced from ITA Section 3



Figure B1: Hirini Street / SH35 Intersection



Figure B2: Crawford Road / Hirini Street Intersection



Figure B3: Crawford Road



Figure B4: Rakaiatane Road



Figure B5: Kaiti Beach Road, Gate 5 to Port

Annexure C – Extracts from One Network Framework Detailed Design – D02:2022

<https://www.nzta.govt.nz/assets/Roads-and-Rail/onf/docs/ONF-detailed-design-document-november-2022.pdf>

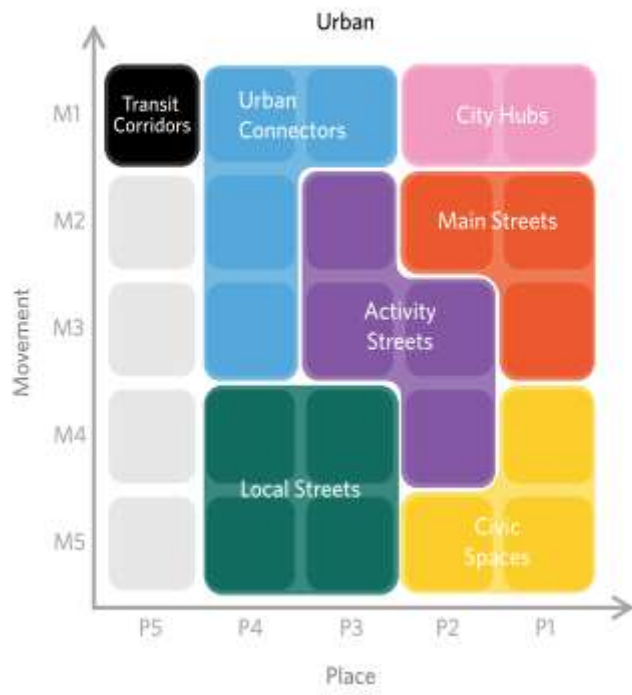
Table 1 - ONF five-point scale for classifying place function

Place function ranking	Level of on-street activity	Typical adjacent land-use	Level of on-street activity – pedestrian volume
P1	<ul style="list-style-type: none"> Very high on-street activity – very high numbers of pedestrians Very high numbers of people spending time in the location Major movement across the carriageway 	High rise office blocks and apartments, central city shopping and entertainment, major commercial centres, streets with this level of place are most likely to be located within the CBD of major cities	>1000 /hour at peak > 5,000 /day
P2	<ul style="list-style-type: none"> High/very high on-street activity – high numbers of pedestrians High numbers of people spending time in the location Significant movement across the carriageway 	Office blocks, low rise apartments, entertainment venues, retail, commercial businesses, community facilities	>2,500 /day
P3	<ul style="list-style-type: none"> Medium to high on-street activity Some people spending time in the location Some movement across the carriageway 	Office blocks and low-rise apartments, retail, entertainment venues, commercial/trade businesses, community facilities, industrial	>1000 /day
P4	<ul style="list-style-type: none"> Low to medium on-street activity related to people going about their lives Limited movement across the carriageway 	Residential, schools, community facilities, low intensity commercial/industrial	<1000 /day
P5	<ul style="list-style-type: none"> Little discernible on-street activity 	Mostly rural except for State Highways (motorways/ expressways) in urban areas	Negligible pedestrian movement

Table 2 - Characteristics of Movement function

Considerations to determine Movement Significance		Nature of Movement	Scale of People Movement (all modes)
M1	Major	Mass movement of people and/or goods on roads or streets that are of major importance in urban areas, within and between regions or nationally.	Typically > 20,000 per day
M2	Significant	Movement of people and/or goods on inter-regional routes or primary roads and streets linking main centres or significant destinations and travel hubs within a city/town or region.	10,000 – 25,000 per day
M3	Moderate	Movement of people and/or goods around a city, town or region	3,000 – 12,000 per day
M4	Minor	Local movement by people making short trips or connecting to connector roads	300 – 4,000 per day
M5	Low	Local movement by people going about their daily lives	Typically < 500 per day

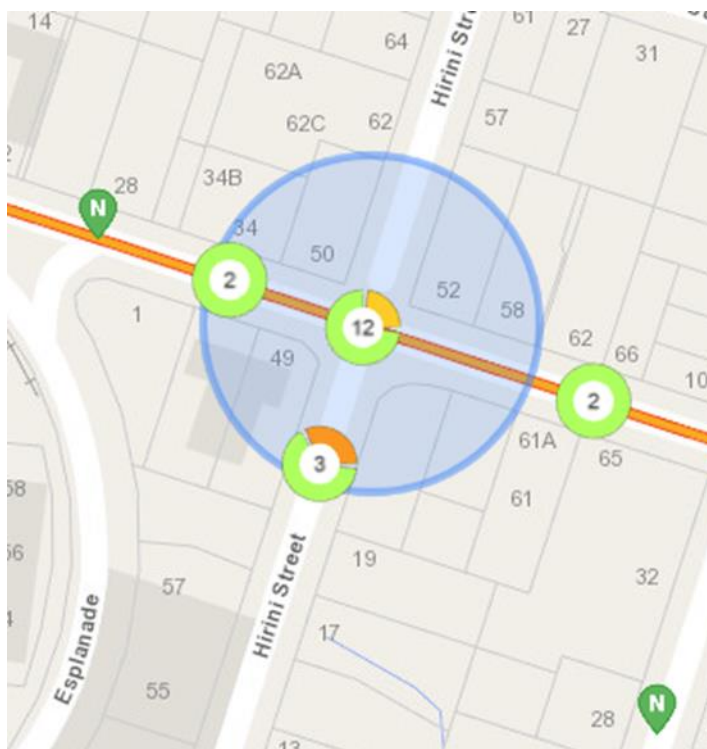
Figure 3 - Urban Street Family



APPENDIX B: INJURY CRASH RISK ASSESSMENT

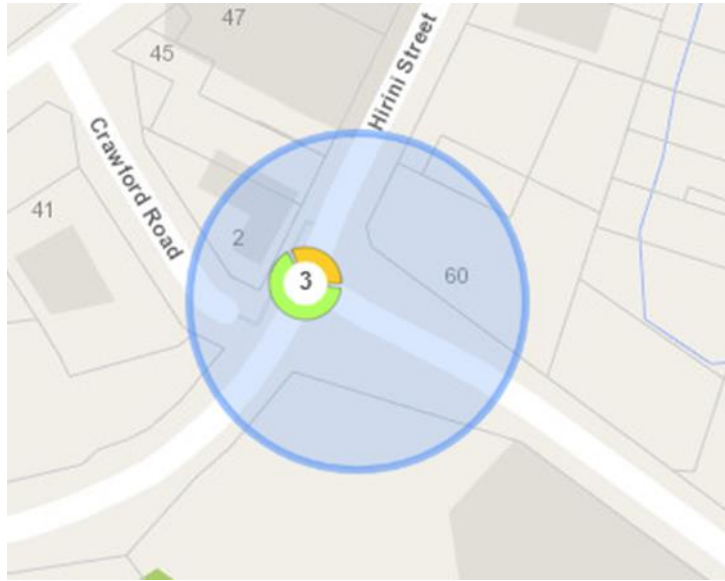
	SH35 / Hirini Street	Hirini Street / Crawford Road
Observed	0.73	0.18
CEC Model Existing	0.399	0.210
CEC Model 2026 (Base)	0.406	0.210
CEC Model 2026 + Full Development	0.417	0.215

SH35 / Hirini Street Intersection Cas rec cords 2018 – 2023 (4 injury crashes)



4 injury crashes in 5.5 years

Hirini Street / Crawford Road Intersection Cas rec cords 2018 – 2023



1 injury crash in 5.5 years

APPENDIX C: TRAFFIC DEMAND ASSESSMENT

SH35 Daily Traffic Demands 2013 – 2023

All data obtained from Waka Kotahi Traffic Monitoring System count site ID: 03500327 located South of Harris Street

Year	Vehicles per Day	Difference to Previous Year
2013	17,446	
2024	19,049	1,603
2015	19,632	583
2016	19,599	-33
2017	20,836	1,237
2018	20,616	-220
2019	20,900	284
2020	20,036	-864
2021	20,998	962
2022	20,232	-766

2021 - 2022 Daily Traffic Demands (Excluding Covid 19 lockdown)

	All Vehicles (vpd)	Heavy Vehicles Only (vpd)	Light Vehicles Only (vpd)
Minimum Weekday	12,120	96	12,025
Maximum Weekday	26,246	1,072	25,669
Average Weekday	22,051	785	21,267
50th Weekday	22,477	859	21,645
85th Percentile Weekday	23,922	956	22,991
95th Percentile Weekday	24,957	999	24,003

Standard deviation	2,170	213	2,034
--------------------	-------	-----	-------

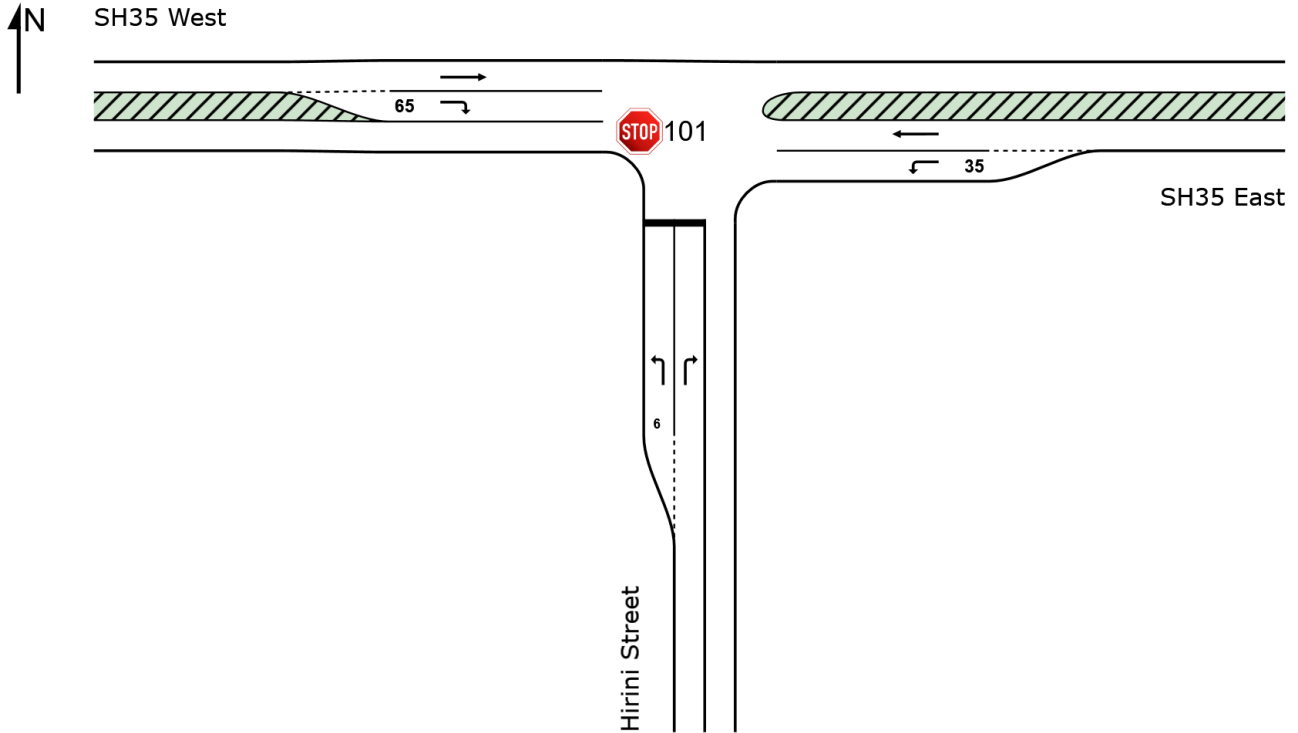
APPENDIX D: SIDRA DATA

SITE LAYOUT

 **Site: 101 [SH35/Hirini Street AM 70pc Test plus Port Increase (Site Folder: General)]**

New Site
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 Site: 101 [SH35/Hirini Street AM 100pc Test (Site Folder: General)]

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Hirini Street														
1	L2	159	34	162	21.4	1.048	135.2	LOS F	12.5	103.9	1.00	2.21	5.06	17.6
3	R2	18	14	18	77.8	1.081	420.8	LOS F	3.3	38.0	1.00	1.37	2.20	7.3
Approach		177	48	181	27.1	1.081	164.3	LOS F	12.5	103.9	1.00	2.13	4.77	15.4
East: SH35 East														
4	L2	58	27	59	46.6	0.042	5.0	LOS A	0.0	0.0	0.00	0.52	0.00	45.9
5	T1	982	29	1002	3.0	0.524	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	49.6
Approach		1040	56	1061	5.4	0.524	0.5	NA	0.0	0.0	0.00	0.03	0.00	49.4
West: SH35 West														
11	T1	610	29	622	4.8	0.331	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
12	R2	118	36	120	30.5	0.397	21.0	LOS C	1.7	14.9	0.87	1.03	1.13	38.2
Approach		728	65	743	8.9	0.397	3.5	NA	1.7	14.9	0.14	0.17	0.18	47.5
All Vehicles		1945	169	1985	8.7	1.081	16.5	NA	12.5	103.9	0.14	0.27	0.50	40.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: ENGINEERABLE | Licence: PLUS / 1PC | Processed: Saturday, 16 September 2023 4:09:38 PM

Project: C:\Users\annaj\OneDrive\AW Consulting\Projects\30 Gisborne Port\Data requests for Judith Conferencing\Reverse Growth SIDRA Test.sip9

MOVEMENT SUMMARY

Site: 101 [SH35/Hirini Street AM 90pc Test (Site Folder: General)]

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Hirini Street														
1	L2	159	34	162	21.4	0.767	41.6	LOS E	4.0	32.9	0.94	1.33	1.99	32.3
3	R2	18	14	18	77.8	0.415	110.9	LOS F	1.2	13.8	0.97	1.05	1.11	20.0
Approach		177	48	181	27.1	0.767	48.6	LOS E	4.0	32.9	0.94	1.30	1.90	30.4
East: SH35 East														
4	L2	58	27	59	46.6	0.042	5.0	LOS A	0.0	0.0	0.00	0.52	0.00	45.9
5	T1	884	26	902	2.9	0.471	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	49.7
Approach		942	53	961	5.6	0.471	0.5	NA	0.0	0.0	0.00	0.03	0.00	49.5
West: SH35 West														
11	T1	549	26	560	4.7	0.298	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
12	R2	118	36	120	30.5	0.315	16.3	LOS C	1.3	11.8	0.82	0.97	0.98	40.2
Approach		667	62	681	9.3	0.315	3.0	NA	1.3	11.8	0.14	0.17	0.17	47.8
All Vehicles		1786	163	1822	9.1	0.767	6.2	NA	4.0	32.9	0.15	0.21	0.25	46.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [SH35/Hirini Street AM 80pc Test (Site Folder: General)]

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Hirini Street														
1	L2	159	34	162	21.4	0.567	26.2	LOS D	2.6	21.8	0.87	1.17	1.38	37.3
3	R2	18	14	18	77.8	0.261	65.5	LOS F	0.8	8.8	0.95	1.03	1.03	26.7
Approach		177	48	181	27.1	0.567	30.2	LOS D	2.6	21.8	0.87	1.16	1.34	35.9
East: SH35 East														
4	L2	58	27	59	46.6	0.042	5.0	LOS A	0.0	0.0	0.00	0.52	0.00	45.9
5	T1	786	23	802	2.9	0.419	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
Approach		844	50	861	5.9	0.419	0.5	NA	0.0	0.0	0.00	0.04	0.00	49.5
West: SH35 West														
11	T1	488	23	498	4.7	0.264	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
12	R2	118	36	120	30.5	0.256	13.2	LOS B	1.1	9.5	0.76	0.92	0.84	41.6
Approach		606	59	618	9.7	0.264	2.6	NA	1.1	9.5	0.15	0.18	0.16	48.0
All Vehicles		1627	157	1660	9.6	0.567	4.5	NA	2.6	21.8	0.15	0.21	0.21	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
 Delay Model: SIDRA Standard (Geometric Delay is included).
 Queue Model: SIDRA Standard.
 Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [SH35/Hirini Street AM 70pc Test (Site Folder: General)]

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Hirini Street														
1	L2	159	34	162	21.4	0.447	20.1	LOS C	2.0	16.6	0.78	1.12	1.10	39.7
3	R2	18	14	18	77.8	0.172	43.5	LOS E	0.5	5.9	0.91	1.02	0.93	31.8
Approach		177	48	181	27.1	0.447	22.5	LOS C	2.0	16.6	0.79	1.11	1.09	38.7
East: SH35 East														
4	L2	58	27	59	46.6	0.042	5.0	LOS A	0.0	0.0	0.00	0.52	0.00	45.9
5	T1	687	20	701	2.9	0.366	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
Approach		745	47	760	6.3	0.366	0.5	NA	0.0	0.0	0.00	0.04	0.00	49.5
West: SH35 West														
11	T1	427	20	436	4.7	0.232	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
12	R2	118	36	120	30.5	0.211	10.9	LOS B	0.9	7.6	0.69	0.86	0.70	42.7
Approach		545	56	556	10.3	0.232	2.4	NA	0.9	7.6	0.15	0.19	0.15	48.1
All Vehicles		1467	151	1497	10.3	0.447	3.9	NA	2.0	16.6	0.15	0.22	0.19	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: ENGINEERABLE | Licence: PLUS / 1PC | Processed: Saturday, 16 September 2023 4:09:37 PM

Project: C:\Users\annaj\OneDrive\AW Consulting\Projects\30 Gisborne Port\Data requests for Judith Conferencing\Reverse Growth SIDRA Test.sip9

MOVEMENT SUMMARY

Site: 101 [SH35/Hirini Street AM 70pc Test plus Port Increase (Site Folder: General)]

New Site
 Site Category: (None)
 Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Hirini Street														
1	L2	173	48	177	27.7	0.518	22.4	LOS C	2.5	21.5	0.81	1.16	1.24	38.8
3	R2	24	20	24	83.3	0.260	51.9	LOS F	0.8	9.5	0.93	1.04	1.02	29.6
Approach		197	68	201	34.5	0.518	26.0	LOS D	2.5	21.5	0.83	1.15	1.22	37.4
East: SH35 East														
4	L2	69	38	70	55.1	0.053	5.1	LOS A	0.0	0.0	0.00	0.52	0.00	45.8
5	T1	687	20	701	2.9	0.366	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
Approach		756	58	771	7.7	0.366	0.6	NA	0.0	0.0	0.00	0.05	0.00	49.4
West: SH35 West														
11	T1	427	20	436	4.7	0.231	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
12	R2	132	50	135	37.9	0.259	12.2	LOS B	1.1	10.5	0.72	0.90	0.80	42.0
Approach		559	70	570	12.5	0.259	2.9	NA	1.1	10.5	0.17	0.21	0.19	47.8
All Vehicles		1512	196	1543	13.0	0.518	4.8	NA	2.5	21.5	0.17	0.25	0.23	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: ENGINEERABLE | Licence: PLUS / 1PC | Processed: Saturday, 16 September 2023 4:09:36 PM

Project: C:\Users\annaj\OneDrive\AW Consulting\Projects\30 Gisborne Port\Data requests for Judith Conferencing\Reverse Growth SIDRA Test.sip9