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 E-Mail:

Telephone: +64-7-849-9921 Judith.makinson@ckl.co.nz

1 September 2023

Introduction

- 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:
 - 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:
 - 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 SH35Wainui 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 twoway 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 Hirni 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 / Hirni Street intersection is a stop- controlled tintersection. Formal left and right turn lanes are provided on SH35 Wainui Road and Hirni 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 / Kait Beach Road as local streets.
- 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.

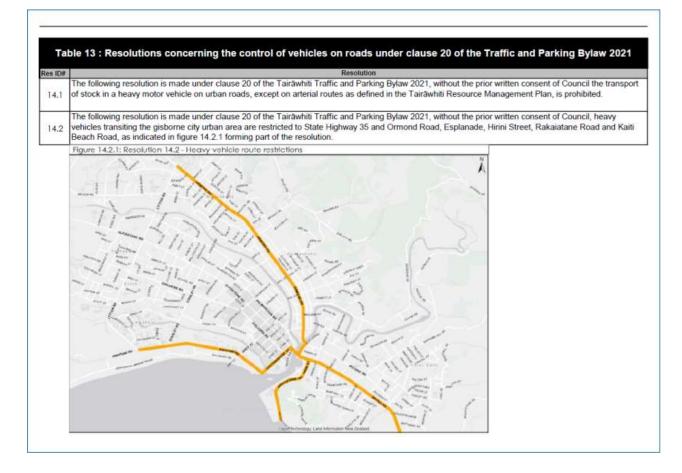


Figure 2: HCV Access Route Resolution

- 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 Hirni 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.

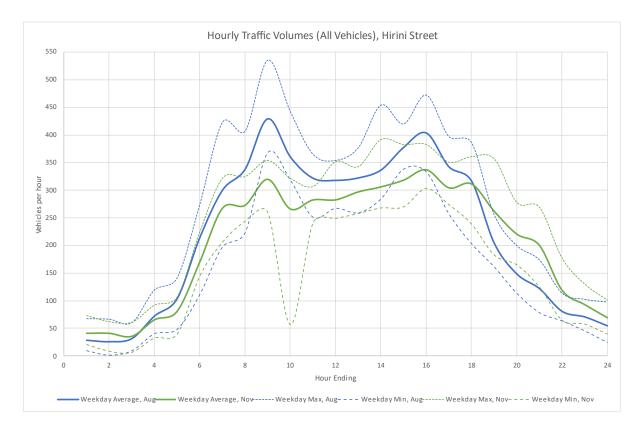


Figure 3: Hirini Street Daily Weekday Traffic Volume Profiles

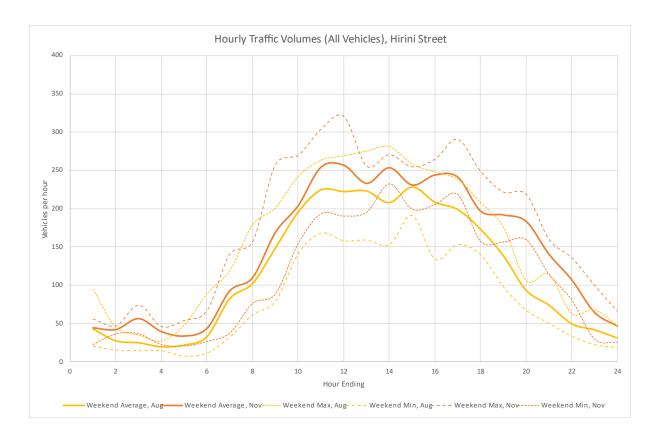


Figure 4: Hirini Street Daily Weekend Traffic Volume Profiles

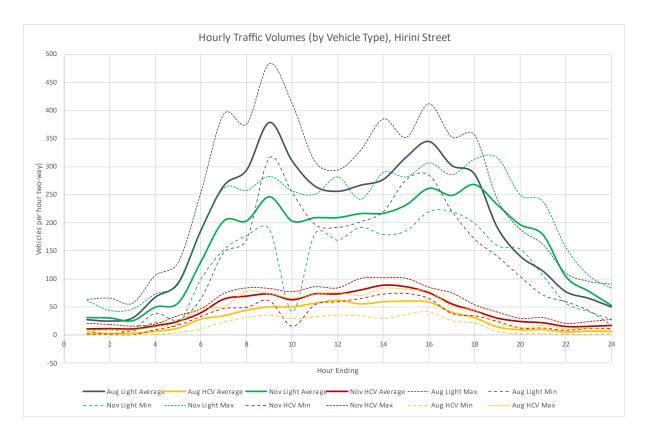


Figure 5: Hirini Street Daily Traffic Volume Profiles by Vehicle Type

- 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.

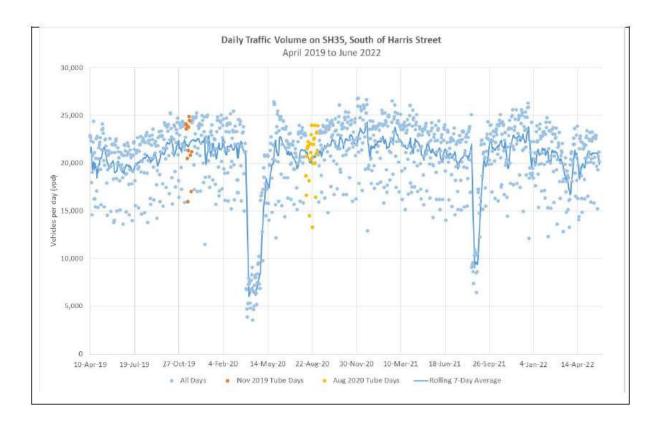


Figure 6: SH35 Traffic Volumes August 2019 to April 2022

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.

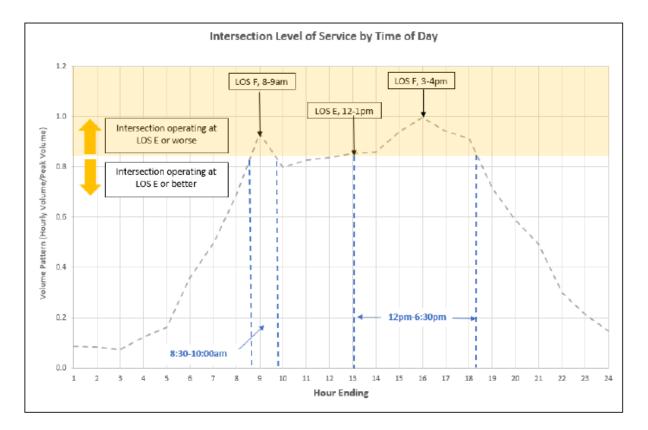


Figure 7: Hirini Street / SH35 Intersection Operation Profile (Typical Weekday)

- 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.
- 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	Investmen t Priority	Priority Weight	Impact on priority (out of 5)	Overall Score (IP weight x contribution)	Total	Regional priority (RTC)	Waka Kotahi IPM priotity
laruheru			· · · · ·	Safety	50%	5	2.5				
äver Walking	GDC	Shared walking and cycling path along Taruheru River	2021/22 - 2024/25	\$7,422,442	Reliability	30%	2	0.6	4.1	1	5
and Cycling path along laruneru kiver	2024/23		Access	20%	5	1					
Campion to		C Separated cycleway linking Makaraka to the city	2024/25 - 225/26	\$4,200,000	Safety	50%	5	2.5	4.1	1	6
Makaraka	GDC				Reliability	30%	2	0.6			
Cycleway		Mananana to the city	223/20		Access	20%	5	1			
airāwhiti		Develop and implement Tairāwhiti Walking & Cycling	2021/22 -	\$6,520,630	Safety	50%	4	2	3.6	2	6
Walking &	GDC				Reliability	30%	2	0.6			
Cycling Network		Network Plan	2031/32		Access	20%	5	1			
H2 Inter-		Safety and resilience corridor	2021/22 -		Safety	50%	4	2			2411
egional		work to improve key journey			Reliability	30%	4	1.2			
connections Waioeka Gorge)	tions between Cisborne and 200	2026/27 \$22,059,000	Access	20%	1	0.2	3.4	3	4		
		Hirini Street intersection improvement	2021/22 - 2024/25	\$5,150,000	Safety	50%	3	1.5	3.2	4	3
astland Port	WK				Reliability	30%	5	1.5			
100033					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).
- GDC has not identified the Hirini Street / SH35 intersection in their 2021 Development Contributions policy.
- 34. The Waka Kotahi Tairawhiti 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.

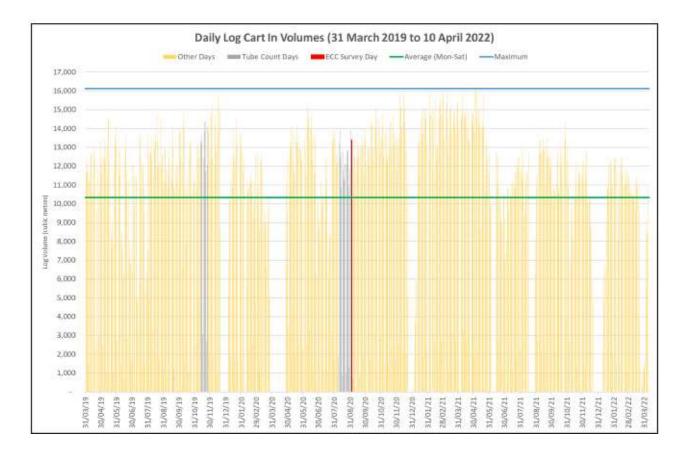


Figure 9: Daily Log Cart In Volumes 31 March 2019 – 10 April 2022

- 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.

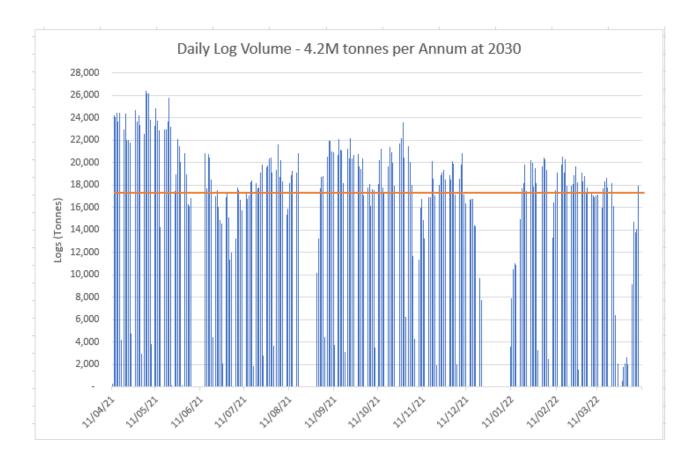


Figure 10: Future Daily Log Cart in Volumes - 4.2M Tonnes per Annum at 2030.

- 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).

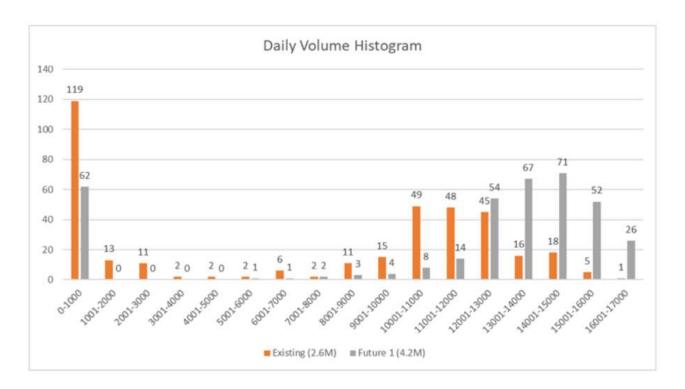


Figure 11: Existing 2.6m Tonne p/a v Future 4.2m Tonne p/a Port Operations

- 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.

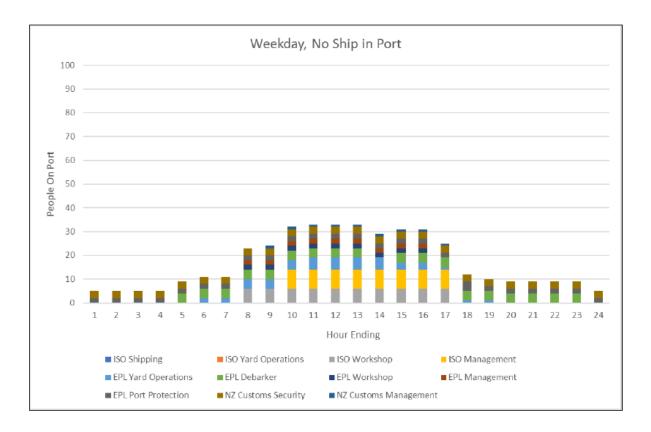


Figure 12: Weekday Staff Numbers on Site - No Ship

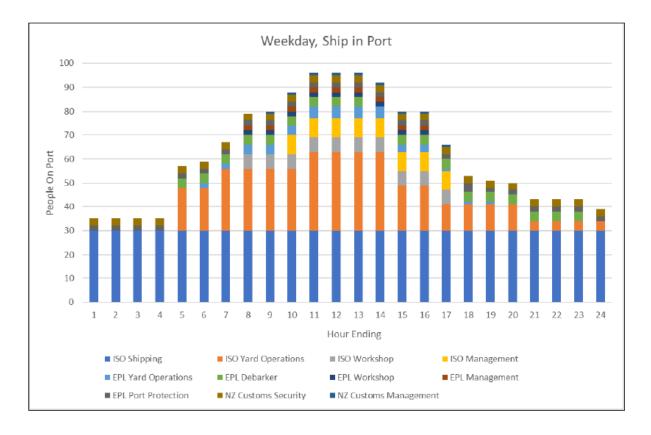
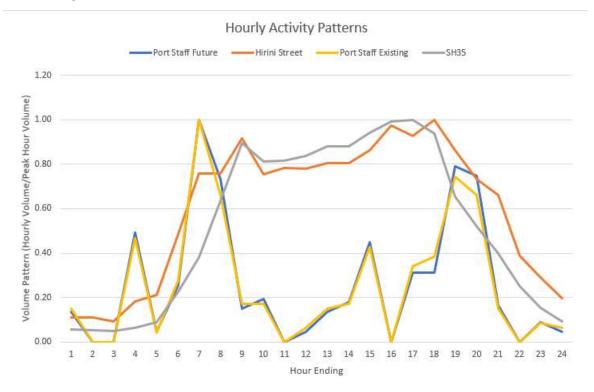
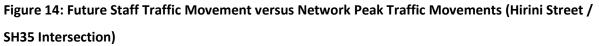


Figure 13: Weekday Staff Numbers on Site - Ship in Port

- 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.





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 <u>Street / SH35 intersection in its current form compared to if no second berth was</u> <u>permitted?</u>

- 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 operates safely and efficiently. We are agreed that either a roundabout or signalisaton 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 addressed through consents 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 arenot a matter to oppose the application.

<u>Is the increase in HCV traffic on Hirini Street / Rakaiatane Road / Kaiti Beach Road likely</u> 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 meets 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	 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	 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	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	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	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	

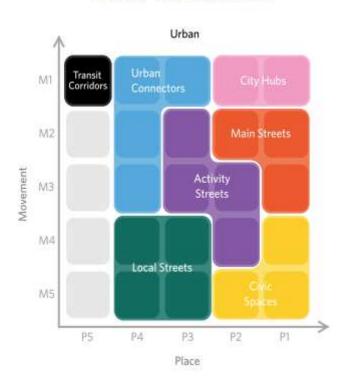


Figure 3 - Urban Street Family