

Before the Hearings Commissioners

Under the Resource Management Act 1991 (the **RMA**)

In the matter of a submission by Waka Kotahi NZ Transport Agency on
resource consent LU2200107.

and in the matter of 21 Ralph Trimmer Drive
Marsden Point (Northport)

Joint statement of evidence of Angela (Angie) Crafer and Catherine Lynda
Heppelthwaite for Waka Kotahi regarding LU2200107 at 21 Ralph Trimmer Drive,
Marsden Point

Dated 22 September 2023

1 INTRODUCTION, QUALIFICATIONS AND EXPERIENCE

- 1.1 This joint statement of evidence has been prepared by Ms Crafer and Ms Heppelthwaite.

Angie Crafer

- 1.2 My name is Angela (Angie) Louise Crafer. I am one of the Founding Directors at Flow Transportation Specialist Limited, where I have worked since February 2005.
- 1.3 I have a Masters degree in Transportation Planning and Highway Engineering from the University of Southampton and a Bachelors degree in Engineering Mathematics from the University of Bristol.
- 1.4 I am a Chartered Professional Engineer (CPEng), an International Professional Engineer (IntPE(NZ)), a Chartered Member of the Institute of Logistics and Transport (CMLT), and a Fellow of the Institution of Highways and Transportation (FIHT).
- 1.5 I am a member of the Engineering New Zealand Transportation Group, the Institute of Transportation Engineers and the Resource Management Law Association.
- 1.6 My work experience includes over 30 years as a consultant Transport Planner & Transport Engineer, including 28 years in NZ and 3 years in the UK.
- 1.7 My experience includes transport planning and transport engineering of many major transport schemes and large and small developments, for public and private organisations, and local and national authorities.
- 1.8 These have included providing transport advice on area-wide masterplanning, design, assessments of development proposals, and reviewing applications for designations, plan changes and land use resource consents. Such projects include large scale development at Whenuapai, Hobsonville Peninsula, Maungawhau (Mt Eden), Sylvia Park, and large housing developments in Ara Hills (Orewa), Mt Roskill, Northcote, Māngere, and Middlemore.
- 1.9 I have also provided transport planning and engineering advice to business cases, optioneering, assessment and concept design. Examples include

arterial roads as part of Auckland Transport's Connected Communities project, cycle networks in Māngere East, Manukau, Manurewa, and New Lynn, SH16/Lincoln Road interchange, SH1 Whangarei to Te Hana, SH20 Mt Roskill motorway, and a variety of safe system assessments and safety audits.

- 1.10 In September 2020 I was asked by Waka Kotahi NZ Transport Agency (**Waka Kotahi**) to:
- a. attend a meeting and site visit at Northport;
 - b. provide transport planning advice including on the scope of the transport assessment to be undertaken;
 - c. review the transport assessment carried out in support of the proposal for an expansion of activities at Northport; and
 - d. provide advice to Waka Kotahi regarding its submission.

- 1.11 I visited the site on 18 September 2020, and am familiar with the site and the surrounding transport network.

- 1.12 I have been engaged by Waka Kotahi to be its transport planning expert.

Cath Heppelthwaite

- 1.13 My full name is Catherine Lynda Heppelthwaite. I am a principal planner for Eclipse Group Limited. I am presenting this planning evidence on behalf of Waka Kotahi.
- 1.14 I hold a Bachelor Degree in Resource Studies obtained from Lincoln University in 1993. I am a full member of the New Zealand Planning Institute, a member of the Resource Management Law Association and the Acoustical Society of New Zealand. I have more than 25 years' experience within the planning and resource management field which has included work for local authorities, central government agencies, private companies and private individuals. Currently, I am practicing as an independent consultant planner and have done so for the past 18 years.
- 1.15 I have extensive experience with preparing submissions and assessing district and regional plan and policy statements in relation to infrastructure. I am currently assisting Waka Kotahi and KiwiRail in relation to planning processes for the NPSUD and MDRS and other plan changes including Whangarei District Plan Change 1, Natural Hazards. I also prepare a wide

range of resource consent applications for residential, commercial and industrial business activities for private sector clients.

- 1.16 I visited the site in relation to a separate plan change and am generally familiar with the area. I have been engaged by Waka Kotahi to be its planning expert.

2 CODE OF CONDUCT

- 2.0 We have read the Environment Court's Code of Conduct for Expert Witnesses (2023) and agree to comply with it. Our qualifications as experts are set out above. We confirm that the issues addressed in this brief of evidence are within our areas of expertise. We have not omitted to consider material facts known to us that might alter or detract from the opinions expressed.
- 2.1 Except where specifically attributed, the evidence reflects our shared opinion within our areas of expertise.
- 2.2 Ms Crafer attended the expert conferencing on 5th and 20th September 2023. Ms Heppelthwaite attended the expert conferencing on 20th September 2023. We will both be attending further conferencing planned for 26th and 27th of September and anticipate providing more detailed (individual) statements for rebuttal and/or at hearing.

3 SCOPE OF EVIDENCE

- 3.0 Ms Heppelthwaite will outline the statutory and planning framework relevant to the Waka Kotahi submission and Ms Crafer will address transport planner matters.
- 3.1 Given the narrow focus of the Waka Kotahi submission, our assessment focuses on how best to address transport effects from the application by conditions of consent within the RMA framework. In this assessment we have taken into account wider demand for capacity on the existing transport network (i.e additional to Northport).
- 3.2 As the consent conditions are our focus, and they are continuing to evolve via expert conferencing, we consider it is more helpful to provide an overview of what we consider the consent conditions should address rather than a line-by-line analysis of the S42A (or Mr Hoods) version of conditions

when we know these are currently under review by the applicant and will subsequently be updated.

- 3.3 In preparing our evidence, we have considered the combined Northland Regional Council (NRC) and Whangarei District Council (WDC) Officer Report prepared by Mr Blair Masefield and Ms Stacey Sharp¹ (Hearings Report) along with relevant application material. We have also considered the Joint Witness Statement dated 5 September 2023 (JWS), the evidence of Mr Brett Hood and Ms Narissa Harrison (for the applicant) and the supporting technical assessments reviewed by Ms Harrison (for the applicant) and prepared by Mr Robert Inman (for WDC).

4 STATUTORY CONTEXT (MS HEPPELTHWAITE)

Regional Policy Statement for Northland

- 4.0 The Hearings Report² addresses, among other things, how the proposal would be considered under RPS as it relates to *Efficient and effective infrastructure* but does not address in detail the effects of the proposal on other regionally significant infrastructure.
- 4.1 In particular, the RPS contains a strong policy framework seeking land use integration with development commencing with Objective 3.11 and following through to Policies within 5.1 (Regional form) and 5.2 (Effective and efficient infrastructure) and Methods 5.1.5.

Objective 3.11 Regional Form:

Northland has sustainable built environments that effectively integrate infrastructure with subdivision, use and development, and have a sense of place, identity and a range of lifestyle, employment and transport choices

*Policy 5.1.1 Planned and coordinated development
Subdivision, use and **development should be located, designed and built in a planned and co-ordinated manner which:***

[...]

- (c) Recognises and **addresses potential cumulative effects** of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;*
*(d) Is **integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;***

¹ <https://www.wdc.govt.nz/files/assets/public/v2/documents/services/planning/resource-consents/lu2200107-northport/5-s42areport/s42a-staff-report.pdf>

² Hearings Report, Section 12.1.1.5.

[...]

(h) Is or will be serviced by necessary infrastructure

4.2 The explanation for Policy 5.1.1 includes the following :

[...]

It is also critical that infrastructure considerations are effectively integrated with plans for development. There are many advantages of planning in this way including:

- *Creating more vibrant communities by recognising the role infrastructure plays in economic, social and cultural wellbeing by ensuring infrastructure is in the right place at the right time;*
- ***Avoiding constraints on the use and development of infrastructure;***
- ***Avoiding costly and untimely / unplanned upgrading of infrastructure; and***
- ***Avoiding adverse environmental effects caused by a lack of infrastructure.***

4.3 The Applicant has set out ‘triggers’ (within its Transport Assessment) where effects, which I would describe as cumulative in the broader environment, will occur (thus falling within Policy 5.1.1(b)).

4.4 From the JWS, in broad terms, all transport experts agree that the traffic movements generated by the application will have effects on capacity and safety along State Highway 15 (**SH15**) (at three local road intersections) and at the SH15 / State Highway 1 intersection.

4.5 The Policy 5.1.1 *Explanation* utilises directive language with regard to describing advantages of integration between land use and transportation planning which neatly summarise the key risks of the proposal if effects are not appropriately managed. In particular:

- constraints on the transport network capacity and safety may occur; and
- unplanned upgrading.

4.6 Mr Mutton³ has confirmed that no funding has been determined or allocated for SH15 improvements which indicates that ‘servicing’ of the proposal must occur within the current transport network in order to avoid capacity and safety issues and/or unplanned upgrading.

³ Evidence of Mr Stephen Mutton, dated 22 September, paragraph 7.6.

- 4.7 Policy 5.1.3 is also very directive in regards to the use of “avoid”:

5.1.3 Policy – *Avoiding the adverse effects* of new use(s) and development

Avoid the adverse effects, including reverse sensitivity effects of new subdivision, use and development, particularly residential development on the following:

(a) [...]

(c) ***The operation, maintenance or upgrading of existing or planned¹³ regionally significant infrastructure¹⁴***; and

(d) [...]

Method 5.1.5

5.1.5 Method – Statutory plans and strategies

(1) ***The regional and district councils shall:***

[...]

(d) ***Give effect to Policies 5.1.2 and 5.1.3 through objectives, policies, and methods / rules in regional and district plans and when assessing resource consent applications ; and***

(e) ***Give effect to Policy 5.1.3 by requiring consultation with relevant infrastructure providers and owners of regionally significant mineral resources when proposed subdivision, land use or development may have an adverse effect on the operation, maintenance or upgrade of regionally significant infrastructure or on the regionally significant mineral resources***

- 4.8 Discussions have commenced and continue between Northport and Waka Kotahi (relative to the “consultation” aspect of the Method). Regardless, the Councils are required to give effect to Policy 5.1.3 (avoid adverse effects on regionally significant infrastructure) when assessing resource consents.

Whangārei District Plan

- 4.9 Objective TRA-O2 and Policy TRA-P3 reinforce the RPS policy themes:

TRA-O2 Integrate Transport and Land Use Planning

Integrate land use and transport planning to ensure that land use activities, development and subdivision maintain the safety and efficiency of the transport network.

TRA-P3 Transport Network Capacity

To manage the scale and design of subdivision and development by:

1. Ensuring that there is sufficient capacity within the transport network to cater for the proposal.

2. Requiring subdividers and developers to meet the costs of any upgrades and/or extensions to the transport network which are directly attributed to measurable impacts of the subdivision or development.

- 4.10 Overall, in addition to the matters addressed in the Application and the Hearings report, I consider the policy framework in the RPS and WDP requires:
- a. recognition of cumulative effects of development on infrastructure (RPS Policy 5.1.1(c));
 - b. development is integrated with the funding, implementation, and operation of transport infrastructure (RPS Policy 5.1.1(d) and WDP TRA-O2);
 - c. development is or will be serviced by infrastructure (RPS Policy 5.1.1(h) and WDP TRA-P3);
 - d. adverse effects on the operation of regionally significant infrastructure area avoided (RPS Policy 5.1.3(c) WDP TRA-P3); and
 - e. that Councils implement 5.1.3 when assessing resource consents (RPS Method 5.1.1(1)(d)).
- 4.11 I consider further changes to the consent conditions are necessary to achieve the outcomes sought by the policy framework.

5 TRANSPORT CONTEXT (MS CRAFER)

- 5.0 The Traffic Impact Assessment (“TIA”) prepared by WSP for the Applicant⁴ provides an assessment of existing safety and intersection visibility conditions along SH15 Port Marsden Highway (“SH15”), and an analysis of the potential traffic effects of the proposed development at key intersections along SH15.
- 5.1 Traffic modelling of intersections has been undertaken by WSP using isolated intersection SIDRA models for the morning and evening peak periods. WSP considered future scenarios with and without the port expansion. They obtained future predicted traffic volumes from the

⁴ Traffic Impact Assessment, Northport Development in Whangarei, WSP, 31 August 2023

regional network Whangarei Traffic Model, which is operated by Stantec. Stantec had updated the network model to reflect 2018 census data and 2020 growth predictions. The future year models of the intersections (by WSP) therefore take into account future background growth in traffic as predicted by WDC.

- 5.2 I consider that the traffic modelling methodology is suitable for the purpose of assessing the Northport proposal and its likely effects on the operation of key intersections along SH15 during peak morning and evening periods.
- 5.3 WSP's modelling identified that the following intersections will have operational concerns in the future during peak morning and evening times:
 - a. SH15/Marsden Bay Drive/Rama Road;
 - b. SH15/Marsden Point Road;
 - c. SH15/One Tree Point Road/McCathie Road; and
 - d. SH15/State Highway 1 (SH1)
- 5.4 The TIA reports on sensitivity tests that reduce the operational effects at the intersections, testing management and mitigation measures that would avoid the port traffic peak coinciding with the road network peak, and reduce traffic volumes generated by the port. The TIA states that a minimum of 20% reduction of port traffic would be required during both the morning and evening peaks so that the key intersections perform at a level of service D in 2040 (Section 8.2.3 of the TIA). This is on top of already assuming an 8% reduction in what might otherwise have been road traffic, due to some freight being transported by rail, even though the Marsden Point Rail Link has not yet been confirmed as being delivered.
- 5.5 The TIA suggests that the expansion of the port will lead to an increase in local employment, and that this will result in less traffic passing through the SH1/SH15 intersection. These trips have the potential for being made by bicycle, particularly with the availability of e-bikes. The TIA refers to the lack of safe routes for people cycling, but doesn't suggest improvements. I note that future routes for people cycling are being considered by WDC, including routes between Waipu, Ruakākā and Marsden Cove. In my view, an active mode facility for people walking and cycling should be provided

that connects Northport to any route that provides connectivity between SH15 in the vicinity of Mair Road or Marsden Bay Drive, to Ruakākā, Marsden Cove, or Marsden City.

- 5.6 Cumulative effects of traffic growth, from Northport as well as any other development, will result in an increase in the number of people exposed to safety issues, and the likelihood of a crash resulting from such safety issues will increase. With increases in traffic, peoples' tendency is to accept smaller gaps in the traffic, the harder it gets to turn into or across the main traffic flow. All traffic making turns and crossing over SH15, as well as any local employees living in the surrounding Ruakākā, Marsden and One Tree Point areas, will need to turn into and from SH15 to get to and from Northport. The latter will mainly use Marsden Point Road, One Tree Point Road, and Marsden Bay Drive, but turning/crossing at any of the intersections along SH15 will become more of a safety risk as through volumes on SH15 increase. The speed environment along SH15 increases the likelihood of any turning/crossing crashes that might occur resulting in serious injuries or fatalities.

6 COUNCIL/APPLICANT PROPOSED CONDITIONS FRAMEWORK

- 6.0 With regard to consent conditions generally, key principles for drafting include that they must avoid, remedy or mitigate effects resulting from the proposal, be reasonable, can provide information about effects and cannot rely a third party action / approval to be complied with.
- 6.1 We consider there are two key transport effects to address; both of which arise from the increase in traffic volume proposed by the applicant:
- a. safety; and
 - b. capacity (acknowledging capacity can impact safety).
- 6.2 We both also agree that the applicant's proposal is not the only traffic source In relation to future possible effects on the State highway.
- 6.3 In relation to the conditions proposed (within the JWS), we agree that the general structure of the conditions which propose a series of 'steps' to monitor, identify issues and provide traffic volume reductions as a method

to reduce effects is conceptually sound. However, the detail about how and when mitigation will be provided where traffic reductions are not provided, is still to be resolved. We acknowledge that this is not an easy issue to address but it is important to ensure the safe and efficient operation of the intersections should the full funding of upgrades simply not be available prior to the adverse effects occurring.

- 6.4 In particular we support the general approach included in the JWS of addressing safety via the Crash Reduction Assessment condition suite and capacity via the Traffic Monitoring Report suite of conditions. As noted, we generally agree with the construct of the conditions below; but not the wording of how mitigation will be delivered (which we will continue to work on at conferencing):
 - a. Crash monitoring assessment (S42A conditions 79 to 83 (noting these have been amended by JWS conditions 61 to 64) and Mr Hood's conditions 61 to 64);
 - b. Traffic Monitoring Report and consequential Intersection Assessment Report (S42A conditions 83 and 84, JWS conditions 66 to 67A) and Mr Hood's 66 to 67)
 - c. Ms Heppelthwaite does not support the Councils conditions 86, 87, 88 (and struck out 91-93) or Mr Hoods conditions 68 to 70 and 72 which set out a process for determining a contribution/refund.
- 6.5 We generally agree with a 'catch all' condition (such as S42A condition 89 or Mr Hood's condition 71) which indicates that if intersection improvements which address capacity (Intersection Assessment) are complete, then Intersection Assessment conditions are considered to be satisfied. However, some further discussion is required regarding the level of upgrade that is required to satisfy this condition. The wording of such a condition needs to relate to a suitable upgrade that covers the effects of the activities in full, rather than an upgrade that is only suitable at the time at which an upgrade has been triggered as being required.
- 6.6 As signalled above, we retain reservations regarding the implementation of mitigation measures for:

- a. demonstrating how any recommendations of the Crash Monitoring Report have been, or are in the process of being implemented (S42 Condition 82 updated by JWS 65 and Mr Hood's 65); and
 - b. demonstrating how any recommendations of the Intersection Assessment Report have been, or are in the process of being implemented (S42 Condition 82 included in the JWS as 67B, and Mr Hood's 63).
- 6.7 We also signal our general support for Council's S42 recommended conditions which provide for:
- a. Construction traffic management plan (conditions 40-43, Mr Hoods condition 34);
 - b. Port and Site travel (condition 60);
 - c. Cruise ship traffic management (conditions 61-64); and
 - d. Provision of an active mode connection where a (specified but broader) active network is planned (Mr Hood's 73).

7 MATTERS REMAINING

- 7.0 In regard to our concerns around implementation of the requirements of the Crash Monitoring and Intersection Assessment Reports; the JWS agreed transport conditions (generally) set out a series of 'steps' for effects to be identified and mitigation to be proposed. However, while JWS 67A (Intersection Assessment Report – the last 'step') requires effects to be identified and mitigation proposed, it does not go as far as to require mitigation to be implemented should the intersection upgrades not be implemented at that point. Nor does it require Northport to reduce transport volumes to below 'trigger' levels (ie. to a level where adverse effects are avoided).
- 7.1 This reflects the fact that while Northport is a significant contributor to the need for intersection upgrades, it is not the only contributor and cannot, by itself, resolve the network capacity constraints.
- 7.2 It is however clear that Northport's proposal will generate effects and therefore the consent conditions should, in our opinion, control these prior

to the intersection upgrades being carried out. We consider the consent conditions should include setting a limit on vehicles/per hour during peak periods (to manage those effects) either on a permanent basis or alternatively, until such time as a network upgrade solution is available. We are also open to alternative approaches which achieve a similar outcome.

- 7.3 To achieve this, Ms Heppelthwaite proposes an additional condition (67XX) that would come into effect if mitigation recommended in condition JWS 67A(iv) is not available.

67XX. Where mitigation identified in Condition 67A (iv) is not implemented, the consent holder shall reduce traffic volumes to:

- (i) 300 vehicles per hour inbound to the port in the morning peak period*
- (ii) 200 vehicles per hour outbound from the port in the morning peak period*
- (iii) 200 vehicles per hour inbound to the port in the evening peak period*
- (iv) 300 vehicles per hour outbound from the port in the evening peak period*

measured at the Northport entrances, if the SH15/One Tree Point Road intersection has not been upgraded in accordance with condition X, otherwise:

- (v) 700 vehicles per hour inbound to the port in the morning peak period*
- (vi) 200 vehicles per hour outbound from the port in the morning peak period*
- (vii) 200 vehicles per hour inbound to the port in the evening peak period*
- (viii) 700 vehicles per hour outbound from the port in the evening peak period*

measured at the Northport entrances until the SH15/Marsden Bay Drive/Rama Road and SH15/Marsden Point Road intersections are suitably upgraded.

For the purposes of this condition, the morning peak period is 6:30 to 8:30am and the evening peak period is 4:00 to 6:00pm.

- 7.4 These limits are based on the advice of Ms Crafer (who in turn has relied on the evidence in chief of Ms Harrison). Ms Crafer notes that the volumes have been based on the trigger levels put forward by Ms Harrison⁵ and are identified as the point at which mitigation is required. These volumes have only been provided by Ms Harrison for the morning peak period.
- 7.5 However, Ms Harrison reports that some of the intersections are predicted to operate with a level of service E or F in the evening peak period. In the

⁵ Evidence of Ms Harrison, 24 August 2023, paragraph 41.

absence of any evening peak trigger volumes, Ms Crafer has assumed a counterflow to the morning peak volumes.

- 7.6 Ms Crafer has referred to the profile of traffic volume at the SH15 telemetry count site, just northeast of Bens View Road, to determine the time periods for the morning and evening peaks.
- 7.7 These limits and time periods provide a level of traffic where Northport can operate without requiring mitigation to address capacity at the intersections along SH15; i.e. it is a way of managing capacity effects on the transport network generated by Northport.
- 7.8 We support this condition, combined with those noted below for the following reasons:
 - a. the traffic volumes have been set in reliance on Ms Harrison's evidence⁶ which identifies levels where the three intersections identified will no longer achieve an acceptable level of service in the morning peak period;
 - b. Ms Harrison's evidence⁷ and WSP's TIA⁸ identified a range of actions which are available to reduce traffic volumes (some of which WDC has proposed to include as management plans in WDC Conditions 60 to 64);
 - c. The timeframe for full implementation of the consent is approximately 10 years which will enable solutions with other parties to be identified (and possibly implemented) before the full extent of traffic (effects) are anticipated to occur; and
 - d. the condition is a backstop to protect the regionally significant infrastructure from adverse effects (as required by the RPS) but only in the event that mitigation has not been implemented. It is the final 'step' in a range of actions which provides the Applicant with opportunities to take actions to avoid its activation.

⁶ Evidence of Ms Harrison, 24 August 2023, paragraph 41.

⁷ Evidence of Ms Harrison, 24 August 2023, paragraph 44.

⁸ WSP Traffic Impact Assessment, dated 31 August 2022, Section 10.

8 ALTERNATIVE APPROACH

8.0 We have also considered if the suggested condition referred to in paragraph 7.3 above could be framed to relate to just the proposed activity traffic, rather than total Northport traffic. For this to occur, there would need to be reliable baseline traffic data collected at the Northport entrances and consideration of existing consents (including those that are not yet generating any traffic). Ms Crafer considers this approach may be difficult due to the seasonality of activities for baseline traffic, consented activities, as well as the proposed activities, however is open to further discussion with Ms Harrison during expert conferencing on 26 September 2023.

9 CONCLUSION

9.0 In conclusion:

- a. Northport's proposal will increase traffic volumes and generate effects on the safety and capacity of State Highway 15 (regionally significant infrastructure);
- b. other activities will also contribute to safety and capacity effects on State Highway 15;
- c. we support the general approach included in the JWS of addressing safety via the Crash Reduction Assessment conditions and capacity via the Traffic Monitoring Report/Intersection Assessment conditions;
- d. we also support the S42A proposed conditions requiring a Construction traffic management plan, Port and site travel plan, Cruise ship traffic management and a condition requiring for provision of an active mode connection in specific circumstances;
- e. we retain reservations regarding the conditions for implementation of mitigation measures (arising from the Crash Reduction and Intersection Assessments);

- f. we have included an approach which seeks to manage the effects where safety and capacity improvements are not in place by limiting traffic volumes generated by the applicant; and
- g. we will continue to work on consent conditions and expect to provide detailed commentary on consent conditions either at rebuttal or hearing attendance.

Angie Crafer and Cath Heppelthwaite

22 September 2023