Appendix C. Letter from M Copeland
22 August 2013

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Dear Tony

1. As requested, I have undertaken a high level assessment of the economic effects of the Ara Tūhono Pūhoi to Wellsford Road of National Significance – Pūhoi to Warkworth Section (the Project). This letter sets out my conclusions on the positive and adverse actual and potential economic effects of the Project at a national, regional and local scale.

2. In summary, there will be traffic-related benefits from the Project and also increases in economic activity generated by the Project during both its construction and operation for the local north Rodney area and the Auckland and Northland regions. This letter also considers the Project's business redistribution effects as a consequence of the new alignment of State Highway 1 (SH1).

ANALYSIS FRAMEWORK

3. Viewpoint for economic assessment

An essential first step in carrying out an evaluation of the positive and negative economic effects of a project is to define the appropriate viewpoint that is to be adopted. Defining the appropriate viewpoint helps to identify which economic effects are relevant to the analysis. Typically a city (district) or wider regional viewpoint is adopted and sometimes a nationwide viewpoint might be considered appropriate.

4. For the Project, the local north Rodney area (consisting of Pūhoi and Warkworth and the communities located east of Warkworth including Leigh, Omaha, Sandspit, Snells Beach and Mahurangi East) and the Auckland region are the most relevant communities of interest, because the economic (and other) effects of the Project will largely (but not solely) impact on their residents and businesses.

5. The wider Auckland-Northland region is also a relevant community of interest, given the road will create significant transport improvements for businesses and communities across these two regions.

6. Because of its scale and the nature of SH1 being of regional and national importance, the national economic effects of the Project are also relevant.

With and without analysis

7. To analyse the economic effects of the Project, two forward looking scenarios need to be compared ('with Project' versus 'without Project'), rather than a 'before' and 'after'
comparison. This means the proper baseline for evaluating future economic (and non-economic) effects of the Project are the future volumes of traffic on the existing road network without the Project, not current traffic volumes.

**POSITIVE ECONOMIC EFFECTS OF PROJECT CONSTRUCTION AND OPERATION**

**Summary**

During the Project's five year construction period (2016-20 inclusive) the construction activity will generate increases in expenditure, employment and incomes in the Auckland and Northland regional economies and the local north Rodney economy. As a consequence there are likely to be improvements in the economic welfare of Auckland, Northland and north Rodney businesses and residents from increased economies of scale, increased competition, reductions in underemployed or unemployed resources and/or improvements to central government provided services.

During the Project's operation there will be improvements in the economic welfare for Auckland and Northland businesses and residents (especially for those in the north Rodney area) as a result of savings in travel costs and increased economic activity generated by the Project.

The Project will help facilitate Auckland Council's current growth aspirations for Warkworth as a significant growth area in the north of Auckland by enabling additional population to be accommodated in Warkworth without significant increased traffic congestion, increased travel times and decreased trip time reliability on and adjacent to SH1. This growth will assist Warkworth to achieve "critical mass" such that it can achieve economic efficiencies from economies of scale and scope.

**Project construction**

During the Project's anticipated five year construction period (2016-20 inclusive) there will be increased economic activity for Auckland and Northland, as a consequence of the additional expenditure, employment and incomes directly generated by the Project's construction and the indirect (or multiplier) expenditure, employment and incomes generated as a consequence of impacts on suppliers of goods and services to the Project and those employed on it.

From a national perspective the level of economic activity (i.e. expenditure, employment and incomes) is likely to be the same with or without the Project – if funds are not utilized for the Project they are likely to be utilized on an alternative NZTA project, even if in a different region in New Zealand. However taking an Auckland, Northland or more localised north Rodney perspective there are likely to be increased levels of economic activity as a consequence of the Project, since without it, the funds earmarked for it are likely to be used elsewhere on an alternative road construction project. Although specific details are not yet known, based on past projects, local firms will be engaged to provide goods and services to the Project, local residents are likely to be engaged to work on the Project and other local firms will in turn provide goods and services to these local firms and employees.

Economic impacts such as increases in business turnover, employment and incomes are not in themselves measures of improvements in economic welfare or economic wellbeing. However, there are economic welfare enhancing benefits associated with increased levels of economic activity. These relate to one or more of:
13.1 **Increased economies of scale:** Businesses and public sector agencies are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;

13.2 **Increased competition:** Increases in the demand for goods and services allows a greater number of providers of goods and services to enter markets and there are efficiency benefits from increased levels of competition;

13.3 **Reduced unemployment and under-employment** of resources: To the extent resources (including labour) would be otherwise unemployed or underemployed, increases in economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment. The extent of such gains is of course a function of the extent of underutilized resources within the local economy at the time, and the match of resource requirements of a project and those resources unemployed or underemployed within the local economy; and

13.4 **Increased quality of central government provided services:** Sometimes the quality of services provided by central government (such as education and health care) are a function of population levels and the quality of such services in a community can be increased if increased economic activity maintains or enhances population levels.

14 It is reasonable to assume that any increases in economic activity as a consequence of increased road construction activity in Auckland (especially centres in the north of the region) and Northland from the Project will give rise to one or more of these four welfare enhancing economic benefits for local businesses and residents.

**Project operation**

**Traffic benefits**

15 The Project will lead to reductions in vehicle operating costs, travel times and accident costs and improvements in trip time reliability for through traffic and local traffic – i.e. local residents and businesses with trip origins and/or trip destinations within the north Rodney area. Trip time reliability improvements mean that less unproductive “buffer time” allowances need to be made to allow for longer trip times which may or may not eventuate. The traffic-related benefits of the Project are detailed in the Traffic and Transportation Assessment Report.

16 It is interesting to note that whereas some major infrastructure projects give rise to national and regional economic benefits, but localised (or “community”) costs, the Project is anticipated to bring significant local economic benefits in addition to national and regional economic benefits. It is estimated that around 50% of trips on the new route will be by local traffic i.e. trips having an origin and/or a destination in Warkworth or the eastern beaches. In addition local traffic, which continues to use the existing SH1 or roads intersecting with the existing SH1, will benefit from the Project in that there will be

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1 Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

2 Source: An analysis of northbound traffic for the 2026 PM peak with the Project indicates 50% of trips on the new alignment are going towards Warkworth town centre and the eastern beaches (personal communication, Mr Andrew Bell, Further North Alliance).
lower volumes of traffic on the existing SH1 and therefore less congestion on these parts of the network.

17 For businesses, savings in vehicle operating costs, travel times and accident costs and improvements in trip time reliability result in increased productivity and improvements in business competitiveness. Businesses will benefit from:

17.1 Reductions in freight rates;

17.2 Increased labour productivity – e.g. travel time savings and improvements in trip time reliability for work-related trips free up employee time for other tasks;

17.3 Reduced capital costs – e.g. fewer truck and trailer units are required to perform the same number of trips in a given time period.

18 For residents the traffic related benefits of the Project will provide expenditure savings and the freeing up of time for other productive or leisure activities.

**Increased Economic Activity**

19 Improving the accessibility within north Rodney, Auckland and the Auckland-Northland region will increase the attractiveness of the local area and the regions for business and residential development. Therefore the Project is likely to result in increased levels of economic activity within north Rodney and the regions from greater employment and population growth. As discussed previously in relation to the Project's construction, increases in levels of economic activity are not in themselves measures of improvements in economic welfare or economic wellbeing. However, there are economic welfare enhancing benefits associated with increased levels of economic activity to the extent that they lead to increased economies of scale, increased competition, reductions in unemployment and under-employment of resources and improvements to services provided by central government.

20 These types of economic benefits arise at the local level. At the Auckland, Auckland-Northland region or national level, some of these benefits will only be transfers – i.e. the faster growth in business and residential development within north Rodney will be at the expense of slower growth elsewhere within Auckland, Northland or elsewhere in the country. This is with the exception of so-called “agglomeration economies” which refer to the beneficial effects of road improvement projects improving the accessibility within a local area, region or country and thereby effectively increasing the density and consequently the economic efficiency of urban centres.

**Facilitating Warkworth’s Growth as a Satellite Town**

21 From an Auckland perspective the Project will help facilitate more extensive residential, industrial and commercial development in Warkworth. The current population of Warkworth of around 3,000 is anticipated to increase to 8,000 by 2040 in the non-statutory Warkworth Structure Plan 2004, whilst The Auckland Plan (a plan for all Aucklanders te mahere a ta-maki makaurau - ma te katoa o ta-maki makaurau) (Auckland Plan) has identified Warkworth as one of two satellite towns (the other being Pukenaho), with a population of 20,000 expected to be accommodated in Warkworth by 2050, together with associated industrial and commercial development to provide local employment opportunities and to meet retail and other servicing requirements. This Warkworth growth scenario from the Auckland Plan has also been incorporated into the draft Auckland Unitary Plan, although it is acknowledged that the draft plan has not been progressed through the RMA process, so these policies are subject to change.
22 The Project will help facilitate Auckland Council’s current growth aspirations for Warkworth as a significant growth area in the north of Auckland. This will assist Warkworth to achieve “critical mass” such that it can achieve economic efficiencies from economies of scale, scope and agglomeration.

23 Also to the extent that the Auckland Plan’s higher population growth forecasts for Warkworth are achieved, the traffic-related benefits of the Project (i.e. savings in vehicle operating costs, travel time costs and accident costs and the improvements in travel time reliability) will be greater than those detailed in the base case results of the Traffic and Transportation Assessment Report, since the base case traffic analysis has used the lower Structure Plan Warkworth population forecasts.

**Property Value Changes**

24 For some property owners, the increase in attractiveness of the north Rodney area for business and residential development is likely to mean increases in property values. However this is likely to be largely a transfer effect from a broader regional or national perspective. To the extent that the Project increases the demand (and price) of properties for development within the north Rodney area, there will be lesser demand (and price) for properties elsewhere in Auckland.

25 Also, whilst the improved accessibility benefits for the occupiers of existing commercial and residential properties will exert upward pressure on these properties’ values, these are a reflection of, not in addition to, the traffic related benefits already discussed above in paragraphs 15 to 18.4

**BUSINESS REDISTRIBUTION EFFECTS**

26 Whilst a small number of businesses on the existing SH1 that will be by-passed by the Project may suffer negative effects from reduced trade due to reductions in passing traffic, the Project will not result in significant business redistribution effects. For some businesses the removal of through traffic on the existing SH1 may enhance business opportunities by improving customer accessibility.

27 Generally under the RMA, retail or business redistribution effects are not relevant insofar as they impact on individual competitors. Such impacts are only relevant under the RMA to the extent they are of such significance that they threaten the public amenity values (e.g. critical mass, sustainability, vibrancy and vitality, etc.) of city, town or suburban centres.5 Amenity considerations are dealt with in the Assessment of Environmental Effects. However my view is that any impacts on businesses resulting from the Project would be unlikely to have recognisable effects on critical mass, sustainability, vibrancy and vitality, given that negative business redistribution effects will occur for only a small

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3 E.g. In the provision of infrastructure and social services.

4 In the same way any negative effects on property values as a consequence of, for example, visual, noise or severance effects of the Project are a reflection of these intangible effects and are not in addition to these effects. Any potential change in property values does not materialise unless and until an owner sells the property. At this point there is a potential wealth loss to the seller, but no ongoing environmental effects to be borne by the seller. The purchaser of the property gains potentially having to pay a lesser price for the property but incurs the costs of the ongoing intangible effects. These intangible effects are covered in other technical reports.

number of businesses and negative effects will also be offset by new business and economic growth elsewhere.

28 The Project is not an investment by a competitor in retail or other businesses within city, town or suburban centres, but may nonetheless have a negative impact on the economic wellbeing of some local businesses dependent to some degree on the passing motorized trade along the existing SH1 alignment.

29 Before considering any such businesses that will be ‘by-passed’ or impacted by the new motorway, there are a number of general comments to be considered:

29.1 From an Auckland and Auckland-Northland regional viewpoint, the Project will not reduce the overall level of business activity – indeed the improvements in accessibility to, from and within the regions brought about by the Project will be likely to increase the overall level of business activity within the regions as a consequence of increased competitiveness for local businesses and an increase in the regions’ attractiveness to live in or visit. Therefore, any losses in trade for individual businesses will be offset by increases in trade for other businesses.

29.2 Business transactions involve transactions between suppliers and consumers. Where consumers change their destination purchasing patterns, there are likely to be benefits to them as well as to the suppliers who gain trade. Such benefits should not be ignored by focussing only on suppliers who lose trade.

29.3 Lost sales revenue greatly overstates the “bottom line impact” on business suppliers. It is really only lost profits, which are likely to be considerably less than lost sales revenue, that are the cost impact on suppliers who lose business. Over time, businesses will react to their new business environment to minimise such lost profits by downsizing, changing their offering or by relocating.

29.4 Even without the Project, businesses must address changing business conditions and their future viability is not assured.

29.5 In some instances, property purchases by the NZTA will include a component for lost future business profits, and these business owners will therefore be compensated.

29.6 Competing businesses will be similarly disadvantaged. For northbound traffic, there will be no direct access from SH1 along the length of the highway from the Dairy Flat service centre to north of Warkworth. For southbound traffic this will be the case from north of Warkworth to the Papakura motorway service centre. Motorists will be forced to leave the highway to purchase fuel or food for example, along these entire lengths of the SH1 motorway. In the case of accommodation and goods and services other than fuel and food there will be no outlets with direct access off the SH1 motorway (or expressway) for much greater lengths.

29.7 Over time growth in business sales (as a result of population and household growth and increases in real per capita and per household expenditure) will help to offset any reductions in sales for some individual businesses as a consequence of the Project.

30 From my drive by assessment of the businesses along the existing SH1 (and on side roads to the existing SH1) from Pūhoi to north of Warkworth, it appears that the
businesses that are dependent to varying degrees on the passing motorised trade and therefore will be affected by the Project reducing traffic volumes on the existing SH1 are: the Honey Centre (incorporating a café, a retail outlet for honey related products and a display of a live bees and honey product manufacturing), the Wooden Wheel toy shop, a winery incorporating a café, an art gallery, a motor lodge in Warkworth, a number of bed and breakfast establishments and some fresh fruit stalls. There are other businesses on or near the existing SH1 (e.g. a golf driving range and indoor sports centre, a timber merchants and a concrete products sales yard) but in my assessment these other businesses are not particularly dependent upon impromptu visits of the passing motorised trade but are instead reliant on planned ‘destination’ trips by the local resident or business population.

31 So far as the businesses within the Warkworth town centre are concerned, they are already bypassed by SH1 and most of the trade for these businesses is not significantly reliant on the existing SH1 passing motorised trade. Vehicles travelling to and from the eastern beach settlements will continue to pass through Warkworth. Also in reducing congestion along existing SH1 and on roads intersecting with existing SH1, the Project will improve local residents’ access to and from the Warkworth town centre.

32 To the extent that the Project facilitates greater residential, industrial and commercial growth in Warkworth (and the surrounding area including the eastern beach settlements), and greater numbers of visitors to or passing through north Rodney, the Project is likely to generate additional trade for these businesses. Also during the Project’s construction there is likely to be additional turnover for some businesses (e.g. cafes, fast food outlets, etc.).

CONCLUSION

33 In my view (supported by the Traffic and Transportation Assessment Report) the Project will:

33.1 Contribute to national, regional and local area economic growth and productivity;
33.2 Improve the reliability of the transport network between Auckland and Northland;
33.3 Reduce congestion and travel times on SH1 between Pūhoi and Warkworth and the surrounding road network; and
33.4 Improve road safety and travel time consistency.

34 I also consider that the Project will:

34.1 Increase economic activity during the Project’s construction and operation;
34.2 Reduce vehicle operating costs, travel time costs and accident costs and improvements in trip time reliability for through traffic and local traffic;
34.3 Improve road network resilience; and
34.4 Help facilitate the Auckland Council’s current urban growth aspirations for Warkworth.
The Project will have negative business redistribution effects for a small number of businesses that will be bypassed as a consequence of the new alignment for SH1.

Overall I consider the net economic effects of the Project are positive and significant at a national, regional and local level.

Yours sincerely

Michael Copeland

Brown, Copeland & Co Ltd