

Memorandum

To: Bill Stead, John North

From: Brett Harries

Date: 17 July 2016

Job N°: N589

Subject: Review of MWH Report “Hot Water Beach to Ferry Landing Peak Summer Traffic and Parking Assessment”

This memorandum briefly summarises some of the key points to emerge from my review of the MWH Report “*Hot Water Beach to Ferry Landing Peak Summer Traffic and Parking Assessment*” (**Report**).

I would note at the outset that the content and analyses described within the report are in the main reasonably sound and of an appropriately professional standard. While I have some issues with some of the detail (as will be explained below), these matters of detail generally have relatively little influence on the bigger picture issues that will be of most concern to the community.

Some of the data collected by MWH in early January this year have proved helpful, notwithstanding that the day of the survey was far from ideal in terms of the poor weather that existed on the day (and in the days leading up to the survey day). It was disappointing however, that much of the data was poorly summarised, and unsupported by appendicised data tables that would have enabled a better understanding and verification of the information obtained from the data. (For example, the graph in Figure 5-8 is of no use at all as it suggests extremely high proportions of parking durations that are less than one hour, because the summarised data that informed the graph failed to exclude circulating vehicles from parked vehicles).

I made a point of getting around Hahei on the day of the survey, and got the firm impression that the traffic and parking demands were noticeably lower than might normally be expected, especially during the morning. The weather on that day certainly did not encourage a long leisurely day in the sun on the beach. Notwithstanding this, there was still plenty of activity, and the longitudinal traffic data that was collected enabled the survey information to be factored up to better represent a peak day, giving a reasonable idea of what a good day would be like. Accordingly, while it was disappointing that a survey day with better weather was not achievable, I am not overly concerned about the quality of the data that was obtained.



Particular thoughts and comments I have on the report are as follows:

1. Regardless of the extent that Cathedral Cove attracts ongoing growth in visitor numbers (currently about 18% p.a. growth based on last 3 years)¹; and whether or not the Great Walks Project (**Great Walks**) proceeds, there is significant ongoing background growth occurring. The Report has no data on growth in dwellings in Hahei, but does refer to Mercury Bay having by far the highest projected usual resident population growth rate on the Coromandel, with a projected 0.7% Average Annual Growth². There is then, going to be ongoing increases in background traffic and parking pressures that have to be accommodated and managed, regardless of visitor number growth.
2. The effects of visitor growth due to Cathedral Cove are substantial. In 2015 it generated 192,600 visitors³ and by 2021 it is projected to generate 250,000 visitors (without consideration of Great Walks). That is an increase of 57,400 visitors p.a., equating to an increase of 30% over existing. This is substantial growth. On top of that, Great Walks is projected to generate 35,000 visitors p.a. under the ambitious scenario⁴. This produces a total additional visitor demand of 92,400 visitors, or an increase over existing of just under 50%. Regardless of allowances for input assumptions or analysis methodologies in the projections, these are huge numbers. How these annual visitor numbers will translate into seasonal peak vehicle numbers is not transparent in the Report, but is described as involving a factor based on seasonal peak versus annual total people numbers on the Cathedral Cove track. Again however, the numbers are big, regardless of the details of calculation.
3. Graphs of the parking survey data⁵ show the Hahei Village Entrance Carpark reaching 92% capacity. This generally accorded with what I saw on the day. Had the day been a good one, this carpark would almost certainly have been at or over-capacity. Given that the proposed 129 space carpark is only to be increased by 71 spaces to achieve 200 spaces; and given that growth in Cathedral Cove track numbers is currently at about 18%, then the expanded 200 space carpark on the Hahei Village Entrance Carpark will likely only meet demands for another 3 years or so. In this regard, I agree with the Report that with or without Great Walks, additional parking elsewhere is required in the short term.
4. The Report does not provide the average duration of stay within the Hahei Village Entrance Carpark, nor does it provide a profile of vehicle arrivals into the carpark (although a profile of hourly parking accumulation is provided in Appendix I which helps a little bit. These points are raised, because the Report refers⁶ to a 'parking turnover' of 2.84, and uses this parking turnover to establish additional parking demands based on growth in vehicle numbers. The Report does not explain how this turnover was established, (for e.g. was it determined on the basis of occupied spaces, or on the basis of carpark capacity which was not fully utilised?). Applying a turnover rate to determine parking also assumes a flat demand profile, which the graphs in Appendix I clearly shows was not the case. The net result is that applying the turnover rate to an estimated increase in vehicle numbers will inevitably result in an under-estimation of increased parking demand. A more correct methodology would have utilised the arrival profile and length of stay to establish an increased parking demand at peak.

¹ Section 5.2

² Table 3-1 in Section 3.1.4

³ Section 5.2

⁴ Section 6.2

⁵ Appendix I – Parking Accumulation

⁶ Section 6.4 bullet point 3



5. The implications of the above calculation deficiency may not be particularly significant however, other than influencing to a degree the time at which the Hahei Village Entrance Carpark meets or exceeds its proposed 200 space capacity. The analyses still confirm that even with an expanded 200 space carpark, additional parking (such as the proposed 150 space carpark at Lees Road), will be required in the short term, which the Report puts at 2017⁷.
6. In terms of generated traffic, the Report provides estimates of peak summer traffic growth between 2016 and 2021, based on various future scenarios⁸. While there may be some debate about the detail of some of the assumptions that went into these calculations (since they are based on various growth projects of Cathedral Cove and Great Walks visitor numbers), it is important to note that the Report is anticipating more than doubling the existing volumes of traffic coming in along Link Road. This is a substantial increase that largely over-shadows a lot of the analytical detail. The situation as I see it is:
 - Even when expanded to 200 space capacity, the Hahei Village Entrance Carpark will shortly (2-3 years) come under significant pressure, which will be exacerbated by Great Walks.
 - The predicted growth in visitor numbers within 5 years, (i.e. a potential doubling of seasonal peak daily traffic into Hahei which at peak will involve an additional 5,730 vehicles per day (**vpd**) on Link Road), will potentially generate significant additional levels of parking demand. If anything, (and as noted above), these projected additional parking demands may have been slightly under-estimated by the Report through use of a parking turnover rate to establish parking demand from vehicle numbers. Regardless, the numbers that emerge are large, and must be supplemented by both additional parking resources, and additional use of shuttle buses. Without both these measures working effectively, Hahei Village will be seriously impacted.
 - Contrary to commentary provided in the Report⁹, there is in my opinion little or no scope for providing additional parking resources within the village, (beyond the Hahei Village Entrance Carpark), and even if there was, should not be contemplated due to the generation of far greater traffic capacity, pedestrian safety, and amenity problems within the village, than the parking overflow problem to be solved. Options referred to in the Report such as formalising on-street (kerbside) parking, redeveloping the beachside parking, and use of Kotare Reserve, are not, and should not, be considered as viable parking alternatives.
 - I agree with the Report that the existing Grange Rd carpark should be managed differently, so that it is used only by buses, shuttles and drop-offs in the peak periods. It should not continue as a free public carpark.
 - This means that an alternative parking source outside the village is essential. In that regard, I agree with the Report that a Lees Road carpark is preferred, particularly as it is best able to accommodate visitors without the need for shuttle services, it can readily provide for the dominant Cathedral Cove visitor demands, and is readily able to integrate into a Great Walks experience. I do however, also agree with the Report that additional supplementary parking on the old Purangi Tip site should also be investigated for Great Walks visitors.

⁷ Figure 7-1

⁸ Table 6-1

⁹ Section 7.3



- Guidance for Cathedral Cove visitors to direct them in the first instance to Lees Road will be essential and crucial. I agree with the recommendation made in the Report for a Signage Strategy. However, effective wayfinding will require more than signage, (for example communication will be required with GPS-based mapping systems such as Google Maps, TomTom, etc so they do not direct Cathedral Cove traffic to Grange Road as they currently do.) A comprehensive approach will be needed to ensure the high levels of diversion of visitor traffic to Lees Road that the Report assumes, and which will be necessary to avoid traffic and parking congestion in the village.
 - I agree with the recommendations in the Report for enhanced shuttle facilities as being essential.
 - I also agree that the Cathedral Cove shuttle should include a stop at the shops.
7. In terms of Park n Ride shuttle services, it is noted that with a 200 space carpark at the busiest peak times, it is likely that two buses will be necessary to avoid lengthy waits. Some long queues have been observed on the busiest days even with the carpark at its current capacity.
 8. I disagree with the statement made in the report about the Hahei Village Entrance Carpark being unattractive for use by beach visitors¹⁰ due to the approximately 1km distance of the carpark from the beach. There is no evidence to support that statement, and it contradicts what can be seen in actual operation. Rather, the Hahei Village Entrance Carpark should be encouraged for use by beachgoers, most particularly if arriving by campervan.
 9. The 'walking village' concept is discussed in the Report, and is discounted as being impractical. In terms of a concept that anticipates banning all vehicle movements within the village, I agree that it would be impractical, and possibly end up doing more damage than good. However, the concept of working toward a village that is more walkable than present should be taken seriously. This could mean measures such as enhancing off-road pathways, safe roadside walking, reduced speed limit (30kph) within the village, shared zones (where vehicles may move but pedestrians always have priority), etc. This also means doing everything possible to avoid drawing unwanted vehicle movements into the village. The concept of intercepting as much visitor traffic before entering the village, i.e either to a Lees Road carpark or into the Hahei Village Entrance Carpark, would assist; as would not creating more visitor parking opportunities within the village.
 10. In terms of carparking charges, these have to be carefully addressed. The motivation for any introduction of parking fees and/or time limits must be primarily to encourage the sorts of parking behaviours that are necessary to achieve the overall strategy, without generating unintended consequences. The primary motivation should not be to simply generate income to pay for infrastructure. The Report correctly identifies some of the possible unintended consequences, but then also notes in several areas that "*TCDC will assess the benefits and disadvantages of introducing parking fees and will make the final decision in regard to future implementation.*" Given how critical parking charges are to achieving a workable parking strategy, and how getting it wrong could potentially backfire in a significant way, it does not seem unreasonable for there to be some level of consultation regarding the setting of any parking charges.

¹⁰ Section 7.3_4



11. Of the recommendations made at the end of the Report¹¹, I tend to fully agree with most. Those that I do not fully agree with are:

- In 2017, the recommendation to “*amend local road signage to direct Cathedral Cove visitors to Lees Road*” needs to be more than just being about local road signage. It should be extended to require the “development of an integrated signage and wayfinding strategy that addresses and complements the parking strategy that is proposed”. Wayfinding is going to be critical to get people to park at Lees Road instead of heading straight into Hahei.
- The reference in 2018 to “*expand the Hahei Village Entrance Carpark to the proposed 200 spaces*”, appears to unnecessarily replicate what is already proposed in 2016 (in row 5).
- The reference in 2019 to “introduction, if demand dictates, for an overflow facility within Kotare Reserve...” is inappropriate and should be deleted.

12. The final recommendation in the table is for annual monitoring of traffic and parking. This will be essential, because notwithstanding the traffic surveys that have been undertaken, the projections of future traffic and parking demands are based on some rather large assumptions, many of which are not validated. For example, if assumptions about demand are either under or over; or if the extent of diversion of visitor traffic to Lees Road is not achieved; or if visitor behaviours are not as anticipated, then these need to be identified quickly to enable improvements to the strategy to be made for the following year. The future unknowns are too numerous to predict with confidence from day one, so a regime of careful monitoring and adjustment must be an essential element of the overall strategy.

I trust that you find this review useful. I would be happy to further discuss any of the above as may be required.

B Harries

¹¹ Section 9, Table 9-1