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Geoff Swainson
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Wellington City Council
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Dear Geoff,

WELLINGTON CITY COUNCIL
BASIN RESERVE ALTERNATIVE OPTIONS INVESTIGATION
SCOPE PROPOSAL - RICHARD REID & ASSOCIATES LTD

We enclose our Scope Proposal for the SH1 Cobham Drive to Buckle St Transport Improvements Project.

The documentation we have supplied:

a) reveals the significant problems with the existing road network, that with special regard to the functioning of the Basin Reserve Roundabout, do not appear to have been specifically addressed by NZTA in its work on the project dating back to 2001

b) provides a concept design which re-organises traffic within the existing road network to address these problems. The concept design:

   i) strengthens the four key transport elements in the city identified in the Ngauranga to Wellington Airport Corridor Plan
   ii) creates a consistent, efficient and reliable flow of traffic within the existing transport network
   iii) separates north-south flows from east-west traffic at the Basin Reserve
   iv) avoids the extreme cost, risk profile and adverse effects of NZTA's Proposed Option A, including the need for a flyover
   v) will save up to $100 million dollars for the Government
   vi) protects the amenity and test status of the Basin Reserve cricket ground
   vii) creates a traffic free War Memorial Park above Buckle St

c) encompasses the whole transport project with a special focus on the Basin Reserve Roundabout. Both our analysis of the existing situation and our concept design proposal form a consistent vision for the transport project which is different in its entirety and emphasis from other options being assessed. We presume that an independent assessment of our proposal will base its evaluation of any part upon a contextual understanding of the whole and will

therefore need to consider our proposal as one package

d) refines the concept design proposal we presented to the Wellington City Council Strategy and Policy Committee on 22 March 2012

We have set out our Scope Proposal in six sections:

1.0 Key drivers
2.0 Transport issues
3.0 Transport opportunities
4.0 Outline of an overall integrated transport proposal
5.0 Concept design for the Basin Reserve
6.0 Traffic flows
7.0 Conclusion

This Scope Proposal is to be read in conjunction with the concept drawings we have supplied.

1.0 KEY DRIVERS

The aim of our work has been to deliver transport improvements for the project without the significant adverse effects, risk profile and extreme costs attached to NZTA's proposal. We have been careful to prioritise a transport approach to solving problems rather than have a pre-determined public space outcome dictate a transport plan.

The key drivers for our concept design proposal are:

1.1 addressing and solving the multi-modal traffic problems of the road network

1.2 creating resilience for the city's road infrastructure

1.3 creating a road network that is inter-connected and accessible across and between routes: from the local to the local, local to the regional (and vice-versa) and along the regional route through the city

1.4 providing for the most efficient flow of traffic within the existing road network rather than creating additional capacity outside the network at the expense of the receiving environment

1.5 ensuring the number of lanes and flows of traffic are consistent and reliable

1.6 separating east-west flows from north-south traffic at the Basin Reserve Roundabout

1.7 maintaining the Basin Reserve Roundabout as the key pivot point and distributor for the city's east-west and north-south traffic, in the process preserving its historic function and position in the city's urban structure

1.8 ensuring the road network is balanced and integrated with the city

1.9 recommending transport options that strengthen and enhance the character and amenity of local areas and public spaces (the discussion of which is partly outside the terms of this Scope Proposal)

1.10 developing solutions that strengthen and enhance the character and amenity of the road network (the discussion of which is outside the terms of this Scope Proposal)

1.11 envisaging urban development opportunities that support the long term vision of

the Ngauranga to Wellington Airport Corridor Plan (the discussion of which is outside the terms of this Scope Proposal)

1.12 identifying practical and affordable implementation stages over the long term (the discussion of which is outside the terms of this Scope Proposal)

2.0 TRANSPORT ISSUES WITHIN THE EXISTING SITUATION

2.1 Transport Issues

Our approach is founded upon detailed observation of the layout and performance of the whole SH1 Cobham Drive to Buckle Street road network, including streets leading to/from the airport and the Wellington Urban Motorway (such as Karo Drive, Vivian Street and Kent / Cambridge Terrace).

Like all our work to date, we have placed major emphasis on site observation at the preliminary stage of understanding the transport project. We have found from past transport infrastructure projects we have successfully prepared alternative designs for that reliance on desk-top research usually encouraged an abstract and detached appreciation of a system which led to assumptions, oversights and inaccuracies about the context, as well as performance of the context.

To aid our understanding I therefore walked the whole of the project on multiple occasions at all times of the day, focusing in particular on morning and evening peak hour traffic movement.

Our ideas for the project came out of this site and traffic performance analysis.

We found that:

2.1.1 the SH1 regional route heading east-west through the city provides two lanes in each direction at the beginning and end of the route. Hence, the inputs and outputs for regional traffic moving through the city are limited to two lanes each:

i) The roads from the airport (Calabar Rd and Cobham Drive) are two lanes in each direction

ii) the road entering the Northern Motorway from Karo Drive is two lanes

iii) Vivian St entering the city from the motorway is two lanes

2.1.2 congestion is created on the SH1 regional route where the provision of two lanes is interrupted. This is caused by the number of lanes being reduced from two lanes to one lane in one or both directions:

i) from Cobham Drive to Wellington Road

ii) from Kent Tce/Ellice St to Paterson St

There are significant downstream effects from these constrictions, including on weekend mornings

2.1.3 congestion is created on the SH1 regional route where one lane is insufficient for the number of vehicles and the importance of the route

i) One lane for Wellington Road, Ruahine Street and the Mount Victoria Tunnel does not provide sufficient capacity for daily and peak hour traffic, particularly for traffic heading west. This seems to be an historical anomaly, as Moxham Ave, a residential street parallel to Ruahine St, is wider than

the regional road. The reason for this is perhaps due to past restrictions placed on use of Town Belt land for roading purposes

There are significant downstream effects from this constriction, including on weekend mornings

2.1.4 congestion is created on the SH1 regional route due to the significant interruption caused by the Tory St traffic lights

i) Traffic on the SH1 regional route heading west from Rugby St to Sussex St and Buckle St experiences significant interruption in its flow where it meets the local road intersection and traffic lights at Tory St. This causes traffic back-up on Sussex St, Rugby St and Adelaide Rd especially at but not confined to peak hours (particularly evening), compromising the shared movement of traffic heading to Cambridge Tce and weakening the performance of the Roundabout as a whole

There are significant downstream effects from this constriction

2.1.5 congestion is created on the SH1 regional route due to the route sharing road space with local traffic heading in other directions

i) the regional route heading west on Rugby St (east) is shared by traffic turning left into Adelaide Rd

ii) the regional route heading west on Sussex St shares the second (middle) lane with local traffic heading north to Cambridge Tce

There are downstream effects from these constrictions

2.1.6 congestion is created on the local roads joining the Basin Reserve Roundabout where one lane is insufficient for the number of vehicles and the importance of the route

i) one lane is provided on Kent Tce for traffic heading south and west which is not sufficient for the volume of traffic, especially ≈ 8.30am to 9.15am week mornings when the back-up can stretch as far back as Courtney Place

ii) on Adelaide Rd heading north the afternoon peak hour traffic, including buses, use only one lane until the two lanes provided after the McDonald's bus stop

There are significant downstream effects from these constrictions

2.1.7 congestion is created within the Basin Reserve Roundabout due to the inconsistent and inefficient layout of lanes interrupting all flows of traffic

i) the inside bus stop / car parking lane on Kent Tce does not continue into Ellice St

ii) the outside single lane on Kent Tce widens into two lanes only on Ellice St

iii) vehicles on Kent Tce wanting to go south or west often use the second lane on Ellice St going east to lane jump the traffic back-up on Kent Tce, causing disruption to both flows of traffic

iv) the second lane of Rugby St turning into Adelaide Rd is blocked by the regional traffic lane on Rugby St heading west (and vice-versa)

v) the bus stop on the corner of Adelaide Road/Alfred St block the inside lane

of traffic heading south off the Basin Reserve Roundabout

vi) buses heading north on Adelaide Rd must share the one lane provided with traffic heading west and north

vii) the regional traffic heading west on Sussex St is blocked by local traffic using the same lane to head north (and vice-versa) before the divide at the Buckle St junction

viii) buses heading north are often stuck in traffic on Sussex St for the same reason

There are significant downstream effects from these constrictions, including on weekend mornings

2.1.8 the provision of car parking on the roads along the SH1 regional route, especially on roads around the Basin Reserve Roundabout and those joining it, take up important usable transport space and interferes with the efficient flow of traffic

i) car parking at the junction of Kent Tce / Ellice St

ii) on Ellice St

iii) on Rugby St (east and west)

iv) both sides of Adelaide Rd

v) along Sussex St until the junction with Buckle St

2.2 Documentation of these transport issues

For documentation of these issues see:

BRR/033/D Existing Situation – Conflict through mixture of one and two lane traffic
BRR/044/D Existing Situation – Conflict through mixture of one and two lane traffic plus car parking

2.3 Comparison with NZTA documentation of the Basin Reserve Roundabout

2.3.1 The plan of the existing roundabout produced by NZTA in its public engagement documents published in July/August 2011 does not record the layout of lanes correctly

2.3.2 Document #24*: "The existing situation – SH1 around the Basin Reserve*" bears no resemblance to the layout of the existing roundabout. By virtue of the plan's numerous errors (at least 9 on our count), it suggests:

i) NZTA has not examined the existing situation in sufficient detail

ii) NZTA had not identified the design problems which make a significant contribution to the dysfunctional performance of the roundabout

iii) most if not all of NZTA's errors of the existing layout are located exactly where these design problems create congestion

iv) NZTA's errors could have led the public to assume the roundabout is not able to cope with present or future traffic volumes

v) NZTA may have incorporated this incorrect data into its traffic modelling of the existing situation and therefore skewed the measurement and assessment of the roundabout's performance

2.3.3 We have not found any documentation placed on public record by NZTA which demonstrates prior recognition of the specific problems we have identified with the layout of the Basin Reserve Roundabout. NZTA has only publicly acknowledged these misrepresentations of the existing layout in Document #24: "*The existing situation – SH1 around the Basin Reserve*" after Richard Reid & Associates brought them to the attention of Wellington City Council and NZTA in a meeting with both parties on 11 April 2012

2.3.4 Furthermore, NZTA's investigation and presentation of options for the Basin Reserve dating back to 2001 do not appear to have ever considered the resolution of the existing layout problems as an option either separately or together with other transport improvements

2.3.5 We have since established NZTA's plan of the existing situation largely shares the same roundabout layout as its proposed Option A, with the flyover removed. This use of Option A in lieu of the actual situation suggests:

i) NZTA began its analysis and conceptual design work from the basis that the traffic problems required a flyover solution, and has therefore neglected the real problems associated with the roundabout layout. This is perhaps not surprising considering a flyover proposal has been on the table for the past fifty years

ii) NZTA has assumed that providing additional capacity outside the existing network is the best solution for traffic congestion, instead of providing for the most efficient flow of traffic within the network by fixing existing traffic problems

2.3.6 As far as we can establish from the public record, all of NZTA's proposed transport solutions for the Basin Reserve since 2001 involve providing additional capacity outside the existing network, re-routing traffic to the north of the Basin Reserve and grade separating regional from local traffic via a flyover and/or tunnel structure

2.3.7 For documentation of these issues see:

BRR/219 Existing Basin Reserve Traffic Plan – NZTA Existing Plan is not accurate / Accurate Plan reveals the dysfunctional layout

3.0 TRANSPORT OPPORTUNITIES WITHIN THE EXISTING SITUATION

3.1 Summary of our observations

In order to make all routes associated with the SH1 road network through the city perform efficiently, consistently and reliably, we have come to the conclusion:

3.1.1 the SH1 regional route heading east/west through the city should be provided with two lanes in each direction along the whole route

3.1.2 major local roads joining/exiting the Basin Reserve Roundabout should also be provided with two lanes in each direction

3.1.3 regional and local traffic flows within the Basin Reserve Roundabout should be separated by providing two lanes in every direction around the Roundabout.

This means that north-south and east-west traffic can flow independently of each other without interference and interruption

3.2 Major limitations to achieving these transport improvements

The major limitations to achieving these transport improvements are:

3.2.1 Mount Victoria Tunnel being only one lane in each direction;

Construction of another tunnel is the essential game-changer. Most of the congestion problems stem from the limitation of the tunnel being only one lane in each direction. Until a second tunnel is built, congestion within the network will remain regardless of whether a flyover is built

3.2.2 traffic lights at the intersection of Buckle St and Tory St:

These lights allow local traffic to join or cross Buckle St preventing regional traffic from exiting the Roundabout effectively. As noted, this causes traffic back-up on Sussex St, Rugby St and Adelaide Rd (particularly evening peak hours), compromising the movement of traffic heading to Cambridge Tce (and vice-versa) and weakening the performance of the Roundabout as a whole. Undergrounding Buckle St before Tory St removes this significant blockage point from within the network and allows Sussex St (the most heavily used road around the Basin Reserve) to function properly

3.2.3 multifarious inconsistencies and inefficiencies in the layout of the Basin Reserve Roundabout:

Correcting these may be minor in change and cost, yet will remove unnecessary conflict disturbing the smooth functioning and flow of the Roundabout and surrounding roads travelling to/from them

3.2.4 For documentation of these transport issues see:

BRR/202 Existing Situation – Key Problems
BRR/203 Existing Situation – Major and Minor Problems

3.3 Major recommendations

Hence, our major recommendations for this important transport project are:

3.3.1 A second Mount Victoria Tunnel and 4 laning Wellington Rd and Ruahine St

3.3.2 Undergrounding Buckle St before the Tory St lights:

This will replace a flyover as the critical transport infrastructure improvement to the Roundabout. The unique aspect of this proposal is that it retains the traffic at the existing grade level of the Roundabout rather than separates it from the urban context with a flyover as a way of overcoming perceived limitations of the Roundabout. It also allows for a traffic free War Memorial Park above Buckle St

3.3.3 Fine tuning the planning of the Basin Reserve Roundabout and surrounding roads/bus stops/bus lanes/car parking:

This will remedy a poorly planned existing situation and allow the project's multi-modal transport objectives to be accommodated and remain integrated with the city

3.4 Comparison with NZTA's recommendations for the Basin Reserve

3.4.1 Our conclusions and recommendations for the project differ significantly from NZTA (as well as the Architecture Centre's). We have searched through NZTA's documentation for the project dating back to 2001 and as far as we are aware have found that our observations and insights for the Basin Reserve have not been raised or incorporated within NZTA's analysis and presentation of design options

3.4.2 NZTA's work has instead concentrated on bridging the conflict of regional with local traffic at the Basin Reserve rather than resolving it

3.4.3 in particular NZTA's work has not seemed to recognise or understand how much the Buckle St/Tory St intersection has contributed to the poor performance of the roundabout. The conclusion reached and continued to be publicly maintained up until August 2012 was that the undergrounding of Buckle St before the Tory St intersection would provide no transport benefits

3.4.4 Hence, NZTA's Option A and B flyover proposals published in July/August 2011 retained the Buckle St/Tory St intersection. At the same time, these options reduced the capacity of local traffic accessing the regional route from the inner city to one lane all around the roundabout. Together, these decisions would have created gridlock for the inner city. Only the Government's intervention for the purposes of a War Memorial Park avoided this potential traffic planning disaster

3.5 The Government's decision to underground Buckle St before Tory St

3.5.1 We are pleased to note, therefore, that the Government adopted our recommendation for undergrounding Buckle St in August 2012

3.5.2 Undergrounding Buckle Street before Tory Street has always been a key part of our transport proposal and was presented to the Wellington City Council Strategy & Policy Committee on 22 March 2012

3.5.3 It was also the most urgent transport improvement I recommended for the project when meeting with Hon Chris Finlayson, Minister Arts, Culture and Heritage, and two Ministry officials on 30 May 2012

3.5.4 It is on record at that time that both NZTA and the Architecture Centre's proposals for Buckle Street differed significantly from this outcome so we have concluded that the Government's decision has been based upon our recommendation

3.5.5 As a result, a key part of our proposal is now being implemented by NZTA. This decision invites our other major recommendations to be implemented without the extreme cost and adverse effects of a flyover

3.5.6 NZTA's design of the Buckle St undergrounding, as presented in a Public Open Day on 22 November 2012, conforms to our concept design

4.0 OUTLINE OF AN OVERALL INTEGRATED TRANSPORT PROPOSAL

4.1 Programme

The aim of our concept design proposal has been to:

4.1.1 create an efficient, consistent and reliable flow of traffic within the existing road network

4.1.2 provide a consistent logic to the design of the SH1 regional route from Cobham Drive to Buckle St. The continuous provision of two lanes in each direction will allow for an efficient and smooth flow of traffic

4.1.3 create a road network that is well-connected and accessible across and between routes from the local to the local, local to the regional and vice-versa

4.1.4 separate regional traffic from local flows at the Basin Reserve by providing two lanes in each direction for both forms of traffic. This will keep them moving independently of one another without interference and interruption

4.1.5 provide for a high-quality-and-frequency north-south passenger transport spine from Cambridge / Kent Tce to Adelaide Rd by:

i) re-organising poorly designed lane layouts

ii) creating room for dedicated bus lanes to move around both sides of the Basin Reserve if exclusive lanes are needed for the movement of buses

iii) keeping car parking lanes free for bus use during both morning and evening peak hour travel times (in the short term) i.e. 7-9am / 4-6pm

iv) dedicate car parking lanes along the route as permanent bus lanes in the long term

v) relocate bus stops where needed to clear traffic lanes for better flow of all modes of transport

vi) maintain a school bus stop and private vehicle drop-off zone for St Marks Church School

4.1.6 follow and strengthen existing walking and cycling routes instead of re-directing them to where heavy traffic is. NZTA typically draws pedestrians and cyclists towards its motorway proposals because its planners do not know how to integrate these modes into their own environments

4.1.7 continue use of the Basin Reserve as an off-road north-south walking corridor

4.1.8 create more space between walking and cycling modes so that there is little or no interference

4.2 Contexts

4.2.1 We have identified 3 key character areas for the SH1 Cobham Drive to Buckle St transport project:

i) Evans Bay/Cobham Drive coastal environment

ii) Town Belt (Wellington Rd to Taurima St)

iii) Basin Reserve (including the four roads which join it – Cambridge/Kent Tce, Paterson St, Adelaide Rd and Buckle St with the National War Memorial)

4.2.2 we have approached our design of the whole transport project with the view that improvements should build upon, extend and enhance the existing character of these areas instead of changing them fundamentally and adversely. Our experience successfully re-designing similar projects has demonstrated that it is possible to achieve the project's intended transport objectives without isolating the regional route from the different contexts it passes through

4.2.3 The proportional relationship between the width of the regional road and its receiving environment is therefore critical in each situation:

i) Cobham Drive's two traffic lanes in each direction maintains a good balance between the open space of the road corridor and the coastal environment

ii) Town Belt – providing two traffic lanes in each direction on Ruahine St creates an appropriately scaled road through/along the edge of the Town Belt. The design of the road corridor should be treated as well as perceived as an addition to the Town Belt rather than the built environment

iii) Basin Reserve – creating a properly functioning roundabout for both regional and local traffic maintains the roundabout as the key pivot point and distributor for the city's east-west and north-south traffic, preserves its historic function and civic role in the city's urban structure, and maintains its exquisite nestled landscape relationship with the Town Belt hills surrounding it. All roads will remain aligned with the Te Aro grid street pattern

4.2.3 we have located and designed all active modes of transport so that they are integrated with these existing contexts. Each major road has also been re-imagined as a civic space (the discussion of which is outside the terms of this Scope Proposal)

4.2.4 we have devised transport solutions which strengthen and enhance the character and amenity of local areas and public spaces e.g. Basin Reserve, War Memorial Park, and other areas (the discussion of which is outside the terms of this Scope Proposal)

4.2.5 we have developed other solutions that strengthen and enhance the character and amenity of the road network (the discussion of which is outside the terms of this Scope Proposal)

4.2.6 For documentation of our overall integrated transport proposal see:

BRR/032/D Richard Reid & Associates Proposal – Two lane system integrated with city structure
BRR/217 Wellington City – Basin Reserve nests inside amphitheatre of Town Belt

5.0 CONCEPT DESIGN PROPOSAL FOR THE BASIN RESERVE

5.1 Generally

5.1.1 our concept design proposal is able to work within very tight spatial and functional constraints in a very efficient and deceptively simple way

5.1.2 does not include work that shows methods of implementation, other improvements and wider recommendations beyond the transport issues in question because these do not form part of the agreed Scope Proposal

5.2 Alignment of streets

5.2.1 Our concept design proposal to resolve the Basin Reserve traffic issues:

i) does not require the re-alignment of streets

5.3 Alignment of lanes

5.3.1 Our concept design proposal to resolve the Basin Reserve traffic issues:

i) re-organises the layout of lanes as per our Drawing BRR/048/D

5.3.2 the new concept design layout envisages a second Mt Victoria Tunnel being built in the long term and provides:

i) 4 lanes on Kent Tce, Ellice St, Paterson St, Rugby St (west), Sussex St

ii) 3 lanes on Dufferin St, Cambridge Tce

iii) 5 lanes on Rugby St (east)

iv) 1 full lane and 1 bus / car parking lane on both Adelaide Rd (south) and (north)

v) 2 lanes on Buckle St (west) and Buckle St (east)

vi) 1 lane for a school bus stop and 1 lane for private vehicle movement in the drop-off zone for St Marks Church School (both arrangements have been re-organised from the existing layout)

vii) we have also identified the potential for a cycle lane on Kent Tce in place of the existing outside car parking bay, as we expect the parking bay will likely need to be removed to accommodate 4 full traffic lanes on Kent Tce. Provision of this cycle lane suggests the other one on Cambridge Tce, although we recognise there is less need here because of the lower traffic volume and more generous road space

5.3.3 the specific alignment and accommodation of lanes, as well as a method for their implementation over the short and long term, have been resolved in detail since the presentation to Wellington City Council Strategy and Policy Committee on 22 March 2012. The information contained in this later work is outside the terms of this Scope Proposal

5.3.4 similarly, our development of solutions that strengthen and enhance the character and amenity of the road network are also outside the terms of this Scope Proposal

5.4 Structures

5.4.1 Our concept design proposal does not require new structures to be built to resolve the Basin Reserve traffic issues except for kerb realignment

5.4.2 Our concept design proposal does not require the construction or demolition of structures for mitigation purposes

5.5 Potential property acquisitions

5.5.1 Our concept proposal to resolve the transport issues re. the Basin Reserve Roundabout:

i) does not require any land owned by St Josephs Catholic Church

ii) does not require the acquisition of properties beyond that which will be required to implement the Ngauranga to Wellington Airport Corridor Plan for a high-quality-and-frequency passenger transport spine

iii) does not require the acquisition of properties along Sussex St

5.6 Active modes

5.6.1 we have included information on active modes throughout this Scope Proposal, including 4.1 Programme, 5.3 Alignment of Lanes and in our concept design proposal Drawing BRR/048/D

5.6.2 with this information, we have taken the long view with regard to the provision of bus lanes and new bus stops

5.6.3 current Greater Wellington Regional Council investigations into providing a passenger transport spine along this route mean that at some stage bus lanes will take precedence over car parking. We have identified new bus stops that are more generous in length and fit within the rhythm of existing distances separating stops

5.6.4 at the same time we also expect to see urban intensification of the inner city continue. With this will come less open space used at ground level for off-road parking and driveways. Closing up these building gaps along the spine will offer other potential bus stop sites in addition to the ones we have identified

5.6.5 hence, we see dedicated bus lanes and new bus stops investigated and integrated over time

5.6.6 we also draw attention to our provision of a larger traffic island at the Adelaide Rd / Rugby St intersection. This allows pedestrians and cyclists moving north-south or east-west to cross without mixing paths

5.6.7 For documentation of our concept design proposal for the Basin Reserve see:

BRR/048/D Richard Reid & Associates Proposal – Two lane system integrated with city structure / Cut and covering of Buckle St

6.0 TRAFFIC FLOWS

6.1 Generally

6.1.1 we have included information on traffic and bus flows in relation to the Basin Reserve throughout this Scope Proposal and in our concept design proposal Drawing BRR/048/D

6.1.2 we note that traffic flows are reasonably constant throughout the day, reaching their peaks in the morning and early evenings with work traffic heading west, especially from ≈ 5.20 – 5.35pm when the whole network further west of the Basin Reserve is unable to process the crossing of regional and local traffic at Taranaki St due to past transport planning shortcomings. In this situation, congestion at the roundabout is present regardless of whether a flyover or a tunnel is built to manage it. However, our repeated observation is that this intensity quickly evaporates

6.1.3 this very short period (15 minutes) of congestion does not warrant the whole-scale change and additional capacity NZTA proposes to and outside the network

6.2 The join of regional and local traffic flows

6.2.1 we expect our proposed transport improvements for the project will provide for efficient, consistent and reliable flows across the network

6.2.2 we have sought a balanced outcome for the overall network where the interconnections and accessibility between routes is as well considered and provided for as the regional route through the city

6.2.3 NZTA's Option A design prioritises the regional route at the expense of local traffic. It increases the inconsistencies and inefficiencies of the existing situation by further reducing the capacity of local roads around and through the roundabout. Traffic backup will continue in these situations regardless of a flyover

6.2.4 Thus, NZTA's Option A perpetuates and exacerbates the fragmentation, interruptions and conflict in the network that we recognised very early on are responsible for creating most of the congestion (see all of 2.0 Transport Issues)

6.3 NZTA's predicted travel time savings

6.3.1 If NZTA's Option A design is adopted, we expect congestion to continue especially for the local roads wanting to join or exit the regional route at the roundabout

6.3.2 The absence of travel time savings for these routes is an oversight of NZTA's public engagement documentation

6.4 Tangible benefits

6.4.1 if NZTA restricted its essential work to implementing our key proposals then:

i) a high percentage of the travel time savings sought for all the routes within the road network would be achieved

ii) the significant adverse effects and cost to the community and the country of building a flyover would be avoided

6.4.2 For analysis of NZTA's missing predictions for traffic movement see our documentation:

BRR/239 NZTA missing predictions for traffic movement
BRR/237 NZTA missing predictions for traffic movement

7.0 CONCLUSION

7.1 We began our work on this project by walking and observing the site on numerous occasions at different times of the day. The question we asked ourselves during this period was "What is the problem that the project is trying to solve?"

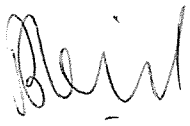
7.2 In essence, our approach has been to address and solve the real problems we have observed and encountered within the existing road network. We have not seen the need to create an entirely new context for the project by providing additional capacity outside the network at the expense of the receiving environment

7.3 The existing road network has sustained NZTA's many attempts to engineer a motorway 'solution' over the past fifty years. These 'solutions' have always diverted regional traffic northwards from its current route around the Basin Reserve Roundabout and involved a flyover or tunnel structure which invariably destroys the amenity of the Basin Reserve and the urban structure of the city

7.4 We believe the existing network has sufficient flexibility, tolerance and resilience to continue to serve the city well into the future

7.5 We look forward to working with you and continuing to develop our concept design proposal for the project.

Yours sincerely



Richard Reid

Director

Concept documentation

BRR/035	Re-thinking the project
BRR/033/D	Existing Situation – Conflict through mixture of one and two lane traffic
BRR/032/D	Richard Reid & Associates Proposal – Two lane system integrated with city structure
BRR/202	Existing Situation – Key Problems
BRR/203	Existing Situation – Major and Minor Problems
BRR/044/D	Existing Situation – Conflict through mixture of one and two lane traffic plus car parking
BRR/048D	Richard Reid & Associates Proposal – Two lane system integrated with city structure / cut and covering of Buckle St
BRR/219	Existing Basin Reserve Traffic Plan – NZTA Existing Plan is not accurate / Accurate Plan reveals the dysfunctional layout
BRR/239	NZTA missing predictions for traffic movement
BRR/237	NZTA missing predictions for traffic movement
BRR/217	Wellington City – Basin Reserve nests inside amphitheatre of Town Belt