

**BEFORE THE INVERCARGILL CITY COUNCIL**

**RMA/2018/148**

**IN THE MATTER** of the Resource Management Act 1991  
("the Act")

**AND**

**IN THE MATTER** being an application for resource consent  
to undertaken the comprehensive  
redevelopment of most of the City Centre  
block bounded by Dee, Esk, Kelvin, and  
Tay Streets to establish a mixed use  
commercial centre.

**BETWEEN** **HWCP Management Ltd**

Applicant

**AND** **INVERCARGILL CITY COUNCIL**

Local Authority

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**STATEMENT OF EVIDENCE OF JEREMY BYFIELD ON BEHALF OF THE NZTA**

**March 2019**

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## **1 Introduction**

- 1.1 My name is Jeremy Byfield. I am a Senior Transportation Engineer for Stantec NZ, consulting engineers. I have been providing advice to NZTA on safety matters in this position for 12 years and prior to that worked for the Land Transport Safety Authority. I have worked in road safety in New Zealand since 1996 when I was employed by the Invercargill City Council. My qualifications include a Higher National Diploma in Civil Engineering.
- 1.2 The NZ Transport Agency (NZTA) was established on 1 August 2008 through amendments to the Land Transport Management Act 2003 (LTMA). The NZTA is a Crown entity created by combining the roles of Land Transport New Zealand and Transit New Zealand.
- 1.3 The NZTA is responsible for allocating land transport funding and has a requirement to undertake its functions in a way that contributes to an affordable, integrated, safe, responsive and sustainable land transport system. NZTA's mandate is set out under the LTMA. It has a statutory responsibility to give effect to the Government Policy Statement (GPS) on Land Transport Funding.

## **2 Expert Witness Practice Note**

- 2.1 While not a Court hearing I note I have read, and agree to comply with, the Code of Conduct for Expert Witnesses as required by the Environment Court's Practice Note 2014. In providing my evidence all of the opinions provided are within my expertise and I have considered, and I have not omitted to consider any material facts known to me which might alter or qualify the opinions I express.

## **3 Scope of Evidence**

- 3.1 A resource consent application has been lodged by HWCP Management Ltd to undertake the comprehensive redevelopment of most of the City Centre block bounded by Dee, Esk, Kelvin, and Tay Streets to establish a mixed use commercial centre. This commercial centre will require vehicle access on to Tay Street which is a state highway and thus managed by NZTA who have an interest in the safety of all users on the highway network.
- 3.2 Stantec provided feedback on behalf of NZTA to a pre-application design and the response to this feedback is contained in the Invercargill Central Integrated Transport Assessment report carried out for HWCP by Abley dated 11<sup>th</sup> February 2019 (the Abley report).

3.3 I still have some concerns with the various access points on to Tay Street and wish to provide comment to ensure that the final result is the safest and most practical solution for all road users.

#### **4 Existing Proposal**

4.1 There are now three access points on to Tay Street. From the west they are a service vehicle access (Access A), the main public car park entrance and exit (Access B) and a service lane (Access C). My comments below refer to the three separate accesses. The previously proposed access to/from SH6 Dee Street had been removed in the Abley report however I note that the evidence of Jay Baththana indicates that an access has been reinstated to a 15 space residential parking area.

4.2 The two way access for service vehicles immediately east of the intersection with SH6 (Access A) is, I believe, too close to the marked pedestrian crossing on Tay Street. I do agree with comments in the Abley report that because the access is restricted to left turn in and left turn out the risk to pedestrians is much reduced. Earlier feedback on the submission resulted in Abley providing a plan with the swept path of an 11.5m truck to the pedestrian crossing, as highlighted in Appendix B of the Abley report. I still have concerns that the proximity of this swept path to the gathering area of the pedestrians looking to cross the road is too close, particularly with the known blind spot on the inside of a turning truck.

4.3 The 4<sup>th</sup> March 2019 report by Jonathan Clease, Consultant Planner states in paragraph 7.82 that this is an existing service lane that is to be retained. All drawings indicate that the service lane is being moved to the west and therefore closer to the existing pedestrian crossing. With a relatively clean sheet for this part of the development we question the need to move the existing access closer to the pedestrian crossing and the vulnerable users who will be crossing Tay Street at this point and would recommend that the existing location is used to maintain the separation between turning trucks and pedestrians.

4.4 NZTA have considered relocating the pedestrian crossing to better accommodate this service vehicle access however moving it closer to the roundabout will reduce the level of safety performance for pedestrians and moving it further away will make it less attractive to pedestrians who are travelling between Dee Street and Clyde Street resulting in more pedestrians crossing Tay Street at an uncontrolled point again reducing the level of safety. I note that the construction of K-Mart south of the roundabout may increase the demand for a pedestrian crossing close to Dee Street/Clyde Street.

4.5 While there are inherent safety issues with pedestrian crossings on four lane roads we note there has only been one pedestrian related incident related to this crossing

in the past ten years. It therefore has a very good safety performance which NZTA wish to retain.

- 4.6 We note that the February response from Abley in to the concerns raised by Stantec with this access stated that either a visibility splay will be provided to improve visibility between truck drivers and pedestrians or an audible warning system will be introduced. We would respectfully suggest that the idea of an audible device is discounted and the consent require the visibility splay to be incorporated in to the building design.
- 4.7 My primary concern with the layout of this access as presented is that vehicles will drive over the widening that has been provided for pedestrian use. and even with street furniture being used to direct pedestrians away from potential conflict there is still a risk when a large vehicle turns left that due pedestrians could be within the driver's blind spot whether they are standing or walking.
- 4.8 Access B is the main public car park entrance and exit located roughly midway between the intersection with Kelvin Street and the existing pedestrian crossing at the Cambridge Arcade. With a proposed capacity of 859 vehicles the fact that access is taken over a busy footpath results in an obvious increase in potential conflict between motorists and footpath users.
- 4.9 The initial drawings showed one wide shared access with Access C but we note that the two have now been separated by moving Access B further to the west providing increased separation from the Kelvin Street intersection.
- 4.10 The car park exit is 40m from the intersection limit line. Traffic modelling shows that a number of vehicles are expected to exit the car park and then cross the two straight through lanes to enter the right turn lane to Nith Street. At peak periods with queuing from the traffic signals this may be a difficult manoeuvre and contribute to increased delays and a reduced level of safety.
- 4.11 In section 6.4 of the Abley report, the dual lane exit is referred to with a comment that the left most exit lane will be marked as Tay/Kelvin while the right most exit lane will be marked Tay/Nith. Elsewhere in the report the right most exit lane is noted as being an interchangeable lane providing an option of entry or exit depending on the dominant direction of traffic flow. While this will undoubtedly reduce delays at certain times it will also negate the lane direction guidance.
- 4.12 There is some debate around the legal requirements for turning from a two lane access in to a two lane road and which lane a driver must turn in to. This needs to be further investigated before a definitive comment can be made and any recommendations provided.

- 4.13 Section 5.4 of the Abley report discusses pedestrian safety and states that ***the design will attempt to provide a 5m x 2.5m pedestrian visibility splay at all vehicle accesses***. With what could be considered a blank sheet this should be a requirement at all locations where vehicles exit across the footpath. With the modelling showing 730 vehicles exiting the car park during the peak evening period, amounting to one every five seconds, any audible device installed in lieu of a visibility splay will be constantly activated and lose any effectiveness.
- 4.14 Given the number of vehicles expected to utilise this car park and the predicted peak hour volumes our primary concern is pedestrian safety.
- 4.15 We further note that there will be an increase in pedestrian numbers directly related to car park usage. Pedestrian access in to and out of the car park is not discussed in the Abley report therefore we have no data on which to base a specific comment on, however it can be assumed that current foot traffic will increase in the area with a car park accommodating 859 vehicles.
- 4.16 Figure 5.4 in the Abley report shows a three lane car park access in Christchurch. While this design would appear to provide acceptable visibility between car park users and footpath users it is not clear if this is the proposed design for this site. It is considered essential to review the conceptual design of this part of the project.
- 4.17 Access C is a left turn entry only in to a one way service lane running behind the properties fronting on to Kelvin Street located approximately 20m west of the intersection with Kelvin Street.
- 4.18 The proximity to the intersection does introduce some safety issues. With a truck indicating to turn left in to the service lane a following vehicle could mistakenly assume the truck is indicating to turn left at the intersection and be surprised by it slowing to turn earlier than that leading to the potential for a rear end crash. This issue could be mitigated through road markings and a dedicated left turn lane however we have not seen a plan showing changes to parking on Tay Street so our comment is limited.
- 4.19 We understand that this service lane will operate in a northbound one way direction. Figure 5.7 in the Abley report may simply have a drafting error but the traffic is shown in travelling in both directions at the Tay Street end. It would need to be made clear that vehicles cannot access the bin storage area shown in Figure 5.7 and then re-enter Tay Street from the service lane.
- 4.20 If confirmed as entry only from Tay Street then NZTA are more accepting of this location and operation, assuming that the vehicle crossing will have a different surface treatment to the footpath as stated in the Abley report.

4.21 We only became aware that the Dee Street access had been reinstated shortly before this report was submitted. Without seeing a plan our comments relate to the proposed location being stated as 15m south of the intersection with Esk Street. With the access being only single lane controlled by a traffic signal there may be occasions when a vehicle exiting results in a vehicle wanting to gain access having to wait on Dee Street. While the footpath is indeed around 5m wide at this point the driveway as such will need to be of sufficient width to enable two cars to pass each other without impeding either traffic flow on Dee Street or pedestrian flow on the footpath.

4.22 We note and support the inclusion of visibility splays on both sides of the access.

## **5 Recommended Improvements**

5.1 In order for the entry in to the two way service lane (Access A) to be as safe as possible for footpath users we recommend that the lane is moved to the east to roughly its current position so that trucks are not crossing the widened part of the footpath which leads to the marked pedestrian crossing.

5.2 We further recommend that due to the width of the access and type of vehicles using it visibility splays are provided on both sides of the access.

5.3 Due to the volume of traffic expected to leave the car park (Access B) in the peak hour period a visibility splay should be mandatory as an audible warning device is not considered suitable.

5.4 It should be confirmed that the service lane (Access C) is one way in the northbound direction and that vehicles will not exit on to Tay Street. Details of how this will be managed will need to be provided to NZTA.

5.5 Whilst some parking has been identified as needing to be removed a formal parking plan is required so that the changes required to parking on the north side of Tay Street can be commented on to ensure all three accesses are provided for and queuing does not encroach in to the through lanes on Tay Street.

5.6 A plan showing the revised location of the residential car park access on Dee Street should be provided to NZTA for comment.

5.7 A plan showing pedestrian access points in to the car park should be provided to NZTA for comment.

## **6 Summary**

6.1 NZTA is not opposed to this development however does have concerns over the new accesses onto and from SH1 and wants to ensure that pedestrian safety is

not compromised by the combination of the significantly higher number of vehicle movements that will take place over the footpath along with the increased pedestrian usage.

- 6.2 My evidence suggests that minor changes can be made at all four access points to provide a safer environment for pedestrians.
- 6.3 Changes at Access A will require an alteration to the ground floor plan at this location which is more than minor but was possible when changes were made to the other two access points. This is the site where the mix of turning trucks and pedestrians wanting to cross the road gives rise to my greatest safety concern within the overall development.

**Jeremy Byfield**

**18<sup>th</sup> March 2019**