The Executive Officer
Road Safety Committee
Parliament House
East Melbourne
Victoria, 3002

Dear Sir or Madam:

Submission: Road Safety Committee:
Inquiry into Pedestrian Safety in Car Parks

Based on Holmesglen Station Rail Car Park

Accidents injuries and near misses

I have nearly been run over by persons driving up the wrong side of Warrigal Rd into the car park.

I have nearly hit by cars or push bikes while walking along the road as there is in part no grade separation between pedestrians or cars.

The rubbish collection contractor ignores the no exit sign and exits via a blind entrance onto Warrigal Rd

A few cars exit through the no exit sign.

Cars have driven over the edge of the car park and into back fences.

Some back fences should be but are not protected against impact from vehicles.

A 1.6m pedestrian unprotected drop onto concrete existed.

There is no access and no designated positions to drop off or pick up rail passengers. This creates traffic congestion and near misses.

A Vic. Govt. contractor has left asbestos like material on site after constructing a drain.

Single horizontal low level treated pine logs of 100mm dia used as a barrier to prevent cars from rolling over
Single, horizontal, low level treated pine logs of 100mm dia are used as barriers between pedestrians and vehicles. The barriers are so low drivers will have difficulty seeing them in some conditions, are a tripping hazard for pedestrians, and vehicles can back over the top of them.

Erosion and lack of maintenance created a tripping hazard for pedestrians and potential initiator for a vehicle roll over.

**Personal action I have taken to have the problems rectified**

I advised the Transport Minister of these issues in Oct 2006, see accompanying letter.

Neither the Minister or his officers, took corrective action.

I advised Worksafe, and subsequently some issues were addressed.

Some aspects have had some corrective action done but it is usually of sub standard and probably not to any relevant standard.

It should not be my responsibility to identify and try and have the shortfalls rectified.

**Brief history of parking for the rail**

Original parking for the rail was on the north east corner of The Boulevard and Warrigal Rd in what is now a golf course. The rail line was duplicated in early 1960s.

The rail car park was subsequently added without consultation with the residents. The original car park was then closed. The rail car park had and still does have many shortfalls.

The rail car park has been further extended, twice towards the west.

We believe there is a master plan taking the car park to near Golfer’s Drive.

**Car backed into rear fence - no protection rails**

Attached are photographs A & B showing a car over the embankment and into a neighbour’s fence. This is the only photographed event, but I believe it has happened on other occasions.

The small concrete wheel stops to rest against, are not sufficient to stop a car rolling over the top or being accidently driven over the top.

In many ways these low wheel stops become a tripping hazard for drivers passengers and pedestrians. Should they trip over the wheel stops they would go over the 1.6m high embankment and onto concrete.

**Protection against fall – no people protection**

The embankment has a 1.6m fall onto concrete or compacted soil. (see photograph C) This could result in death to a person falling over the
edge. The Transport Minister and his staff, took no action to correct the dangerous situation.

Not prepared to give up, I wrote to Work Cover asking them to intervene. They tried but had considerable difficulty trying to get someone to take responsibility for the dangerous situation.

Eventually a hand rail was installed.

**Handrail – inadequate to protect people from slipping through or under**

The hand rail was installed with a top and centre rail. It was galvanized and ‘tacked’ welded to old rail lines.

The hand rail was set back from the edge. (see photograph D)

Being set back and not having a lower rail, it is possible for a child to slip under the centre rail and fall down the gap. It is nearly possible for an adult to do similar.

**Handrail – will not protect against vehicle going over the edge.**

The galvanized handrail was very poorly welded to the old steel rail lines. Welding galvanized steel is difficult at the best of times. Welding it to the old rail lines is probably nearly impossible.

Photograph D shows the hand rail hit by the overhang of a largish vehicle. The slight ‘tap’ has buckled the hand rail and broken several welds.

The hand rail will not prevent a vehicle going over the edge. All the neighbours are at risk of death or injury if a vehicle went over the edge and into their back yard.

**Parking against the rear fences – protection of the fence is required against vehicles**

In photograph E you can see vehicles park against some fences. On one recent occasion a vehicle went through the fence. Luckily, no one was on the other side of the fence. The fence had to be replaced.

**Warrigal Rd to the rail underpass - pedestrian grade separation is required**

Photograph F shows a wheel chair user and her son exiting the car park, indicates the dangers involved.

She cannot hug the timber barriers because of erosion of the bitumen.

Cars turning into this entrance from Warrigal Rd have a blind spot caused by the foundations of the rail bridge.
Cars turning into this entrance are under pressure for a quick entry from Warrigal Rd, by other road users, as the road narrows from three lanes to two.

In the mornings she is facing into the car park and vehicles can come from behind her without her knowledge, as she must at some point cross this entrance.

Rough road surface - a danger to wheel chair user and tipping over

The road surface is so rough it puts the wheel chair user at risk oftoppling. (see photograph F & G)

Wheel barriers - a tripping hazard

The wheel barriers placed as a barrier to vehicles are a tripping hazard. (see photograph G)

I have seen one or two people trip over them. They should not be used. A strong vehicle and pedestrian barrier should replace the existing pedestrian handrail barrier.

Low level, treated pine postss for pedestrian grade separation leaves pedestrians dangerously exposed

Treated pine barriers of 100mm dia and approx 400mm high provide no protection for pedestrians from vehicles and are in themselves, a danger to pedestrians. (see photograph G)

There is no footpath in most of the car park for pedestrians. Treated pine barriers are meant to separate the vehicles from the pedestrians. The barriers do not have the strength to protect the pedestrians.

As vehicles back out from their parked position the driver may not see the barrier because of its low height of poor visibility in the nighttime.

There is no strength in the barriers and a vehicle can easily drive through them.

There is no height in the barriers and drivers of utilities and tray trucks can back over the top of the barrier and into a pedestrian.

Pine barrier bolted construction is dangerous with protruding bolts

I have torn my pants on the protruding bolts sued to construct the barriers. I suppose I was lucky. (see photograph H)
Push bikes used in the rail car park, add another dimension to safety requirements in car parks

We have push bikes trying to share the road with vehicles, and in part share the footpaths with pedestrians.

In different parts of the car park, the bikes are moving in the same direction and in other instances they are moving against the traffic and pedestrian direction.

The cyclists use both the footpath and roadways.

There is no defined segregation for the cyclists.

Being next to the TAFE college there is a potential for considerably more bike traffic than there currently is, especially from Box Hill.

Lighting

Despite lighting (to what standard?), on a winter’s wet night it is nearly impossible to see pedestrians using the walkway.

Lighting of the segregated walkway, may in part, be reduced by shrubs and small trees growing on the rail track.

Exiting into Warrigal Rd is banned except for Connex’s rubbish contractor, and some stupid drivers.

Exiting into Warrigal Rd is banned. It is very dangerous because of a blind spot caused by the bridge foundations.

There is a clear sign near the underpass advising ‘NO EXIT’. (see photograph I)

At night time, the Connex contracting rubbish bin collector usually enters from Stirling Ave and exits via the banned Warrigal Rd entrance.

Sometimes he seems to enter and exit from Warrigal Rd.

Why is it safe for him but unsafe for everyone else?

You can tell the direction of the rubbish collection vehicle from the position of the rubbish bin and its pick up slots. In photograph J, the bin is in the disabled parking space and the contractor comes from Stirling Av and exits into Warrigal Rd.

Treated pine barriers used to protect a vehicle from rolling over an embankment and into flats

The treated pine barriers are used to prevent vehicles from rolling over the embankment and into some flats. These are shown in photograph K.

The pine barriers do not have the height or strength to prevent a vehicle from rolling over and into the flats.
Erosion of bitumen road surface increases risk of vehicle roll over

Photograph K show the pine barriers constructed behind the road edge. It is very easy to drop a wheel over and onto the sloping ground and roll a vehicle over, especially if you are trying to miss a pedestrian as there is no footpath in this area.

To compound the risk several times over, the road way surface has been eroded and large holes exist where it is easy to drop a wheel into and loose control.

While an attempt to rectify the hole has been made after many complaints from myself, it is still a very high risk to both vehicles and pedestrians.

One way traffic not two way traffic – reversing down the road should be eliminated

There is insufficient room provided to drop off and pick up rail travelers at the rail underpass.

Cars coming in from Stirling Ave proceed down towards the underpass and the road becomes narrow. There is no warning to them that they should not proceed, until the cars get part way along the road. That is too late.

The cars either proceed to the underpass and try and turn around or back all the way back to Stirling Ave.

It is a proven fact that backing vehicles are more likely to have an accident compared with a vehicle being driven in the forward direction.

Storm water run off creates slippery footpaths and road surfaces

Storm water from the tracks, courses across the road, because the track drains, are blocked. The sheets of water on the road make it slippery and dangerous, for vehicles and pedestrians alike.

Speed Humps necessary but not effective and create other safety issues.

Speed humps were installed to slow traffic for pedestrian safety and at night when the students would race along the road.

Unfortunately they were only installed partly across the road so at the weekends traffic swerve to miss the humps and at times end in a head on approach to oncoming cars.

We have at times seen a couple of cars skid.
Traffic enters car park up wrong side or Warrigal Rd nearly hitting me

Early one morning I walking across the Warrigal Rd entrance to the car park when I was nearly hit by a car trying to enter the car park.

Being early in the morning, the car had come up the wrong side of Warrigal Rd, behind me and in a hurray to get off the wrong side of Warrigal Rd nearly hit me as it tried to enter the rail car park.

This is not uncommon. It can be corrected by altering the crossover at Warrigal Rd.

Being early it is the only way in to parking positions close to the station underpass.

Contractor parking is not provided – contractors park on the footpath, the road and in the disabled parking

Numerous contractors visit the station and surrounds. Contractors include, money collection, ticket machine repairers, painters, electricians, technicians, cleaners, etc.

There is at least one contractor there every day. Most of them want access to the station and it immediate surround.

The contractors park as close as possible to where they want to work, irrespective of the inconvience to other road users, cyclists and pedestrians. The contractors park on the road blocking or slowing traffic movement and increasing risks of accidents, in the disabled parking area, on the footpath so increasing the risks to pedestrians. (see photograph G)

The contractors do this simply because the car park designers have not made any allowance for the contractors to park where they are most likely need to park. The contractors do this because there is no one supervising or inspecting the parking.

No supervision of the car park for illegal parking by patrons or contractors

Connex do not check or impose fines for illegal car parking.

The only people I have seen inspect for illegal parking in the rail car park is the police. They usually only charge illegal parking in the disabled area or areas specifically marked as no parking. I have never seen them charge a contractor whose parking has increased the safety risks to pedestrians or other road users.

Holmesglen TAFE college students park in the rail car park which is closer to their lecture centre than their own TAFE car park

The TAFE students trawl the car park in both directions after 0930 hrs looking for closer parking to their lecture point. This creates confusion with the limited passing and turning opportunities.
Drop off and pick up – should be catered for in the design

There is no position in the rail car park to stop and either, allow people to get out, or wait for people to arrive by train, a serious deficiency for rail commuters.

To drop people off or pick people off, commuters park in the Boulevard near Warrigal Rd.

When they pick up commuters they do a U turn irrespective of the traffic positions.

They cause considerable interruption to traffic flow.

They create dangerous traffic conditions in The Boulevard see photographs M & N.

My solution was not accepted – but Vic Govt. cannot find an alternative solution

I offered a solution to the above problem. It would improve traffic flow and reduce the safety risks to near normal. It was discussed with Stonnington’s Strategic Planner, and he generally supported the idea.

Unfortunately the State did not like the idea, said it would work on a solution, but in two years has not found a solution to the traffic and safety issues.

Supervision of contractors

The Government’s responsible department does not supervise contractors or their work quality.

One contractor has left asbestos looking material around when he constructed a drain behind 88-92 Argyll St, see photograph L.

Another contractor did not properly weld the handrail supports to the old rail lines for the fall protection.

etc.

Site Inspection Welcomed

The Holmesglen station rail car park is an excellent example of how not to build, manage and maintain, a car park.

Unfortunately it was poorly conceived built, ‘managed’ and ‘maintained’ by, the State Government its agencies and contractors.

I am more than happy to explain the issues associated with the design, operability and associated pedestrian and vehicle usage in this car park.

I am happy to show your team around this car park and all of its issues. Please contact me to make a time.

I have numerous correspondence with various Ministers and government agencies supporting my claims.
Shopping Centre Car Parks

Comment

I have not been injured in these car parks, but a friend drove over her empty pram when she backed out from the car park. She could not see the pram she had left on the road, behind the car.

All shopping trolleys must travel along the roadways, and parked behind a car while it is unloaded. This blocks the road. Adults and children, must stand on the road to unload the trolley or pram.

Car parks are designed for cars, not pedestrians, and certainly not pedestrians with trolleys or mums with prams

The car parking space allotted is usually too short and most vehicles overhand the marked area. Hence there is insufficient room allocated for parking.

There is no pedestrian way for people to safely push trolleys or prams. As the pram or trolley is low and is in front of a person they are very difficult to see, from a driver’s perspective.

Safest direction of movement – forward – backing

Drive in - drive out is the safest direction of movement.

Accidents appear to occur more frequently when backing.

Back in and drive out, I believe the next best solution. When you approach a parking site in the forward direction you have the opportunity so see those you pass and those coming towards you, and those who might be standing in the parking position. You can then assess the safety issues of backing into a parking position. Once parked you can drive out and you have a better view of any traffic – pedestrian or vehicles.

Drive in back out is usually the un-safest option. It may be safe to dive in but you are generally blind when backing out. Adjacent cars hide any on-coming traffic.

Pedestrian routes, especially in large shopping centre car parks are generally not marked

I have travelled Australia in 30+ years of work and seen very, very few pedestrian routes marked in many different types or car parks.

I have seen pedestrian routes better marked in industrial plants than in car parks.
Suggested change

Cars to reverse into their parking position, it is safer to reverse in and drive out.

A protected walkway between two lines of cars, with each car backed onto the walkway. This allows safe access and easy unloading.

Barrier

Install a 150 dia x 1.2m high conc filled barrier off centre of the car park position and fit it with a LED proximity sensor. The proximity sensor to vary in colour from green to red, as the car backs into the position. To be visible from small cars to high bodied vehicles such as tray tops utes etc.

A bay, in which to store the empty trolley.

Height restrictions – underground and multi storey car parks appear to be too low for emergency vehicle access

Many car parks have height restrictions, such as 2 or 2.1m. These height restrictions prevent emergency service vehicles from accessing the car park for accidents and medical emergencies.

Underground car parking to be provided with better directions and position marking

Large underground car parks are being developed. They have poor route marking, position marking, pedestrian route diagrams and surface marking, and it is so easy to become lost.

Lighting in underground car parks – should be better than above ground car parks.

The lighting in underground car parks should be better than in above ground car parks where natural lighting provides some assistance.

Underground parking has no lighting assistance from ambient daylight. When driving in an underground car park on a sunny day, your pupils and some glasses are set for bright light and do not respond quickly enough to the darkened conditions of an underground car park, increasing the risk of an accident.

The artificial lighting in an underground car park should be better than that in an above ground car park.

Copies to the below people are for their information only and exclude the 2006 letter to the Transport Minister. The copies also exclude photographs.

cc Cr A O'Shea, City of Stonnington, PO Box 21, Prahran, Victoria, 3181
cc Cr J Hindle, City of Stonnington, PO Box 21, Prahran, Victoria, 3181
cc Cr G Hannan, City of Stonnington, PO Box 21, Prahran, Victoria, 3181
A car accidentally driven over the wheel stops and over the edge and into a resident's fence.

Note: the low height of the concrete wheel stops
Note: there is no protection to prevent an adult or child from falling over the edge onto concrete
Note: the low concrete wheel stops become a tripping hazard for drivers and passengers
Same car as in photograph A
Holmesten station (a) car park

An unprotected 1.6m dior from the car park onto a concrete
drain.
Note the low concrete
wheel stops which are easy
to drive over.

Photograph c
HOLMESGLEY STATION 1011 car park

Handrail is set back behind the edge.
No bottom rail fitted.
Easy for a child or adult to slip down.

Galvanised handrail tack welded to old rail lines. Tack welds failed when handrail nudged by a high vehicle. Handrail will not protect against a vehicle going over the edge.

Note slightly higher back concrete upstand installed to assist with drainage issue.
A car went through a back fence in this area as there is no protection installed.
There is no grade separation which is required for pedestrian safety.

She cannot drive close to the barriers because of overgrown and poor surfacing, using her motorised wheelchair.

The road surface is very uneven for the wheelchair user.
Holmesglen Station Rail Car Park

Low level light weight treated pine posts perhaps installed to protect pedestrians

Vehicles backing out of a parking area.

Drivers find the low posts difficult to see.

The posts have no strength as a protective barrier.

High vehicles - utes may hop will go over the low barriers.

Contractors use the posts of the footpath where there are no barriers to park their vehicles as it is also close to the underpass.
Holmessen Station Rail Car Park

Treated Pine Barrier 3.6m HIGH
Pedestrian tripping hazard

Does not protect pedestrians from reversing vehicles.

Too low, little strength

Bolts are a danger to pedestrians walking along the footpath.
Holmesglen Station Rail Car Park

Note the no exit sign into Warrigal Rd

Note the car turning around. It may not have realized there was no exit. He may have been looking for a parking spot close to the underpass but that area is none. He may be trying to pick up a passenger.

Note while he is trying to turn around he blocks inward traffic from Warrigal Rd.
Holmesglen Station Rail Car Park

Rubbish bin is in a disabled car park

Rubbish bin is facing such that the rubbish truck comes from Stirling Av, picks up the bin and continues forward and exits into Waingal Rd. It takes no notice of the No Exit sign into Waingal Rd.
Note the barrier and the edge of the road. The barrier is used to prevent cars rolling over the edge and into the flats.

In this area, there are signs of erosion. The pavement has been worn away, and the grass is starting to grow back.

The street is quite steep, and there are some steps leading down to the flats. Be careful when walking here, especially in the rain.
Appears to be asbestos like sheeting left behind by a contractor who built a drain behind 88-92 Argyll St. The drain was only partially effective.
There is no drop off or pick up area allocated at this station. As a result drop off and pick up occurs in the Boulevard close to Warrigal Rd.

This creates all sorts of traffic safety issues as seen below.
The Hon. Peter BATCHelor, MP
Minister for Transport
Level 26, 80 Collins Street
Melbourne Vic 3000
Phone 9655 8683
Email: peter.batchelor@parliament.vic.gov.au

Dear Peter

Proposed Holmesglen Rail Car Park Extension is Not Sustainable

Traffic light cycling times (6sec entry for Warrigal Rd south bound traffic and 22 sec for all exit traffic ex The Boulevard), arterial road design, the rail bridge, direct entry from only the north bound lane of Warrigal Rd into the rail car park and no direct exit to Warrigal Rd from the car park, all limit traffic flow rate in and out of the Holmesglen rail car parking and the Malvern Meadows Estate (the Estate).

The Holmesglen rail car park is very narrow. There is insufficient room to handle passengers being dropped off or picked up within the car park area. There is no opportunity to turn a car around if approaching the station from the west via Stirling Av.

The additional traffic for the proposed extension will help to bring all traffic to a standstill, and frustrate all users. It will add to existing acknowledged road safety issues within the Estate, which will not be obvious to the Department of Infrastructure (DOI) or Vic Track.

The proposal will, increase accident risks within the Estate, increase the frequency and severity of flooding in Argyll St, and is an imposition on the local character of the community. It is a financially unsound project, for which better and cheaper alternatives exist.

Death is a real possibility if you fall over the edge of the unguarded, 1.6m high car park retaining wall. There are many other significant safety issues.

We understand the proposal is to extend the current Holmesglen rail car park from 145 parking positions by another 60 positions, (i.e. 41% increase).

We hope those responsible for the concept, and those managing the design and works, consider all issues impacting on the viability of the rail car parking. Environmentally, economically and implied community benefits, the car parking extension is not justified, given the restrictions and increased safety risks.

Peter, we ask you to consider the more sustainable cheaper and safer alternatives.

Peter, we seek your advice as to who is the project manager / coordinator, and who is the design authority for the works. We also seek your confirmation, that you ensure all of your officers are fully aware of all of the
issues impacting on the proposed rail car park extension, and its adverse impact on safety, traffic flow, environment and local amenity, and that your officers brief you and you advise the 198 effected residents of Malvern Meadows Estate, accordingly.

**Background.**

The Estate and the rail car parking share the only combined entrance and exit from The Boulevard into Warragal Rd.

The only combined entrance and exit at the intersection of The Boulevard and Warragal Rd has been blocked by a number of incidents. When the intersection of The Boulevard and Warragal Rd is blocked, (via high vehicles hitting the bridge, other traffic accidents, traffic congestion etc..) the Estate's residents and your rail car parking do not have an alternative entry or exit.

For our safety (for emergency services access etc..), and the amenity of the Estate's residents, it is imperative the intersection of The Boulevard and Warragal Rd is allowed to freely flow at optimum numbers, not maximum numbers, and without being blocked.

The local road network, combined with the traffic light cycle times, and sequencing, at the intersection of The Boulevard and Warragal Rd, will not sustain current peak traffic numbers.

The 1 km long residential Malvern Meadows Estate is a cul-de-sac, bounded by the rail line to the south, Malvern Valley Public Golf Course to the north and west, and Warragal Rd to the east. This area incorporates the existing Holmesglen rail car park.

All the rail car parking currently must exit through the Estate. Some rail car parking enters through the Estate.

The Boulevard / Warragal Rd intersection handles all traffic for:

- the residents, 198 houses/flats
- emergency vehicles
- medical and community support (meals on wheels)
- community bus
- all exiting the rail car parking
- many entering the rail car parking
- rail passengers being dropped of or picked up by car
- rail maintenance vehicles
- other vehicles using the Estate for parking
- over sized vehicles which can not fit under the rail bridge
- local parking for local shoppers
- proposed additional rail car parking
- proposed 90 place child care centre and 15 staff

Traffic flow in Warragal Rd obviously has priority right of way, and the increasing flow in Warragal Rd is likely to decrease the entry and exit times to the Estate and rail parking.

Traffic turning right from The Boulevard into Warragal Rd is often blocked. South bound traffic is often stopped across the intersection of The Boulevard and Warragal Rd by the pedestrian lights, and/or a bank up of traffic turning right into Batesford Rd. The traffic bank up often prevents traffic exiting from, or entering The Boulevard. Photograph P25
The single combined entrance / exit into The Boulevard is a marked and federally funded ‘Black Spot’, refer photograph P16. There was one reportable accident every 6 weeks at this intersection.

High vehicles hit the low rail way bridge, typically once a week. The occasional accident brings traffic to a halt. These oversized vehicles also use and block roads within the cul-de-sac Estate to prevent driving under the rail bridge.

The existing rail car park does not allow for sufficient and accessible pick up and drop off positions for passengers. The Boulevard is used for rail pick up and drop off with some vehicles illegal parking and many doing U turns or illegally using the traffic divider at Argyll St and The Boulevard as a round about. Refer photographs, P16 & P17.

All vehicles exiting the car park and most exiting the Estate do so through the acute angled intersection of Argyll St and The Boulevard, photograph P12. From a safety perspective, in the evening, when you look west for traffic along The Boulevard you are ‘blinded’ by sun glare from the setting sun, photograph P14.

From a safety perspective, when exiting The Boulevard into Warrigal Rd you are again ‘blinded’ by sun glare reflections off the windows of the building in Warrigal Rd and opposite The Boulevard, photograph P15. There is sun glare in both directions in The Boulevard during evenings.

All possible on street parking in the Estate is not yet fully utilised.

There is currently only one entry into the rail car park from Warrigal Rd. This entrance only services traffic from the south.

A U turn position between the rail bridge and Batesford Rd was installed many years ago (10+yrs?) to allow south bound traffic to do a U turn to be able to enter the rail car park. The U turn facility is infrequently used because it is blocked by traffic turning right into Batesford Rd, see photograph 25. Because of the right and left hand turns from Batesford Rd into north bound Warrigal Rd coupled with north bound traffic there is also insufficient time to make a safe U turn. Additionally the U turning vehicle must cross to the third lane within approx 90m to enter the rail car park from Warrigal Rd.

Therefore south bound vehicles in Warrigal Rd, can not turn directly into the rail car park entrance. South bound vehicles, in Warrigal Rd must enter the residential estate through the only combined entrance / exit and then into the rail car park via Stirling Av.

The entrance into the rail car park from Warrigal Rd is marked as a ‘No Exit’ for traffic, i.e. you can enter but can not exit via the same route. All traffic from the rail parking, residences and others vehicles parked within the Estate must exit through the intersection of The Boulevard and Warrigal Rd. rail car park users who enter the car park from the wrong direction and can not turn around unsafely and illegally exit through the rail car park Warrigal Rd entrance, see photograph P11.

Therefore the traffic lights at the intersection of The Boulevard and Warrigal Rd are the influential factor. The traffic lights control all traffic numbers into and out of the Estate and most of the rail car park users.

Traffic Lights at The Boulevard Warrigal Rd Intersection

See Attachment 1 for analysis of traffic lights operation and traffic flow, supporting the below numbers.
The traffic lights are ‘intelligent’ and coordinated with other lights in Warrigal Rd, traffic numbers and vehicle position sensors. The lights are ‘triggered’ into cycle, by vehicles turning right from Warrigal Rd into The Boulevard and by vehicles turning left or right from The Boulevard.

With the traffic lights cycling at 18 cycles per peak hour with 6 sec to enter the Estate via a right hand turn from Warrigal Rd, and 22 sec to exit the estate including rail parking, vehicle the movements are:

**Entering**, 176/18=10 vehicles per 6 sec cycle for every morning peak cycle

(There is only 5 positions (10 required) in Warrigal Rd to turn right into the Estate)

**Exiting**, 480/18=27 vehicles per 22 sec cycle for every evening peak cycle, with 56% turning right into Warrigal Rd.

(There are 2 lanes of 8 positions, i.e. 16 positions in the Boulevard to turn left or right into Warrigal Rd (but 26 positions are required)

(If the maximum 24 cycles an hour is assumed, then morning peak entering per cycle is 8 and evening peak exiting is 20)

Therefore, Warrigal Rd will be further blocked by traffic at peak times trying to enter and exit The Boulevard, if the rail car parking, child care centre or other multiple occupancy is developed within the Estate area.

The traffic light cycle times and sequencing at the intersection of The Boulevard and Warrigal Rd combined with the local road network design, and that the rail parking does not have its own entry / exit, will not sustain any additional rail car parking.

**Waste of Money**

The rail car park extension is also a waste of money.

The cost is estimated at approx $300 000 for 60 spaces. Assume 11% before tax profit then the simple replacement is:

- Yearly profit from 60 tickets = 60 x 26.7 x 0.11 = $8811pa
- Payback is 300 000 / 8811 = 34 years to pay off the cost

Therefore the money is better spent on projects returning real value, in a shorter time, to more than just 60 Victorians.

People in Zone 2 will take the opportunity to save money by taking advantage of additional parking at the first Zone 1 station. That is you are spending money and decreasing revenue.

**Argyll St Floods**

The current drainage from the railway significantly contributes to frequent flooding of Argyll St between Ayr Av and Stirling Av. Increasing the rail car parking area will increase the frequency and severity of the flooding.

The storm water drain between 92 and 94 Argyll St collects rain water run off from approx a 700m x 40m area of rail property. The side entry pits in Argyll St collect rain water run off from approx 74 to 114 Argyll St.
Rain water run off from the existing car park currently flows through the residential properties from 84-114 on Argyll St. Run off from the rail easement contributes to the water flows into Argyll St and flooding via the storm water drain between 92 and 94 Argyll St. See photos 4-9.

Argyll St floods between 94 and 90 Argyll St, typically once every 5 yrs during daylight hours, and probably a similar frequency during darkness. At times during flooding, water comes up and out of the road side entry pit from the rail car park and spills over Argyll St.

I attached photographs of floods, in Nov 1963 (approx), and Dec 1998. As you can see in the 1963 and 1998 sets of photographs, the water is across the road and very close to property fence line. The 1998 photos were taken after the first extension to the car park and what the railways called, “a significant flooding prevention measure”. refer photographs P4, P5, P6, P7 P8 & P9.

In photo No 9, you can see water issuing from between the concrete plinths forming the retaining wall, and water flowing over the top of the retaining wall. This water flows straight into the backyards of most of the houses on the southern side of Argyll St between Stirling Av and The Boulevard. Photo 8.

All traffic from the rail car park use Argyll St to exit, and so must pass through the flooding, a very dangerous practice at night as flood waters are generally not visible.

The proposed additional car parking with a sealed surface, will add to and increase the frequency and severity of an already intolerable flooding situation of Argyll St. The water from the rail property passing through our residences is a nuisance to us.

Poisoning by railways

As evidence of the above drainage issues, the drainage and run off from the railways is so poor that the railways have poisoned my trees at 94 Argyll St, with poisoned run off water from the rail property in late 1996, refer letter to N Grady, Group Manager, Metrail Infrastructure, cc to City of Stonnington Mr Chris Cook Environmental Health Officer, (18 Nov 1966). While some attempt was made to divert the run off, it is seen in photograph No 9 that the water continues to run between the concrete panels of the retaining wall and through our properties.

Transport Hub and Utilising Community Buses

The aim should be to move more people in same time at least cost with less use of fuel.

Now the car is used as there is currently insufficient, timely and effective local transport from local stations to residences.

The demand for parking at rail stations can be reduced by an improved home - work - home conveyance. This can be achieved by utilising existing smaller public transport movers, such as Stonnington’s and other operator community style buses.
The community type busses can do local, shorter and more frequent trips at morning (0630-0830 hrs) and evening (1700-1930 hrs) peak times. This extends the utilisation of the community busses from say 0600 to 2000 hrs i.e. 14 hrs a day, without additional capital cost.

**Alternately Use Malvern Valley Public Golf Course for Parking**

In the late 1950s and mid 1960s, a rail car park did not exist. A public and rail car park was available on the south west corner of the Malvern Valley Public Golf Course at the corner of The Boulevard and Warrigal Rd. Using a possible parking opportunity at the golf course has significant advantages:

- Traffic is not drawn through the totally residential estate.
- Residents amenity not affected, and eliminate existing amenity problems.
- Parking is closer to the station.
- Parking arrangement can be done to increase parking density.
- Being visible from a major road theft etc can be more easily monitored.

**Multiple Bus Access**

Warrigal Rd should be increased to 3 lanes between Dandenong Rd and High St by widening the two lane bottleneck over Gardiners Creek.

A better bus access and exit to and from the TAFE, and servicing the station, and which did not block Warrigal Rd would improve Warrigal Rd traffic flow.

Coupled with an improved flexible local community style bus service, this option would provide a far better solution for all users and neighbours.

**Safety**

If a private enterprise had a 1.6m unprotected drop with adjacent trip hazards, Work Safe would close them down. The existing Holmesglen rail car park retaining wall, has such a drop. Death is a real possibility if you fall over the edge of the unguarded, car park retaining wall. For the safety of the car park users, including pedestrians, this section of car park should be closed. See photograph P9.

The wooden barriers, 450mm high, separating road from pedestrians are so low they are a trip hazard. They will not protect pedestrians from backing cars.

Soft road edges coupled with erosion from water run off, create trip hazards for pedestrians and roll over potential for vehicles. See photograph P13.

The steps from the car park entrance drive, to the rail user pick up position in The Boulevard (next to 70 The Boulevard) are unsafe, do not comply with Aust Standards, do not have hand rails and are eroded by water run off.

The hump installed across the car park entrance from Stirling Av., to divert run off water, is a trip hazard.
A motorised wheelchair user from Ashwood uses the first entrance which is the rail car park road entrance from Warrigal Rd. There is no footpath from Warrigal Rd to near the underpass. At her risk, she shares the road with incoming vehicles and slows down the vehicles. She also uses this as her exit.

There is no footpath from the rail car park along to Argyll St along Stirling Av for TAFE administrators and students who park in the adjoining street, local residents who use the rail, and any over flow from the rail car park.

Persons unknown, have thrown rocks off the pedestrian overpass on the north side of the rail line over Warrigal Rd. Refer letters to Malvern and Oakleigh police from myself, dated, 30 Dec 2005.

We have placed numerous calls to 000 for stolen vehicles, residential thefts with access from the rail side, vandalism etc., all associated from the car park. There are no barriers to protect adjacent residents from these rail users.

**Conclusion**

Because of limiting access conditions (traffic lights, road design limitations) and other road safety issues, the proposed extension to the rail car parking should not proceed at the Holmesglen rail station.

We do not want to see another failed development, wasting our taxes when we know it is not sustainable.

I would have to ask, 'Why wasn’t the unguarded 1.6m drop reported and rectified, given the number of safety people associated with the train crash at Holmesglen, Metrail’s attempted drainage rectification following the poisoning incident, and the inspections, surveys and drawings done this year for the existing car park?'

Your officers may contact me about the content of this letter, for any clarification or electronic copies of photos etc., they require.

I would be pleased to meet with yourself, and other parties, to explain the details.

Peter, we seek your advice as to who is the project manager / coordinator, and who is the design authority for the works. We also seek your confirmation, that you ensure your all of your officers are fully aware of all of the issues impacting on the proposed rail car park extension, and its adverse impact on safety, traffic flow, environment and local amenity, and that your officers brief you and you advise us, the 198 effected residents accordingly.

Yours faithfully

CA Mentiplay

DR Mentiplay B Eng (Mech), MIEAust, CPEng

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