



Beverly Hills Multi-storey Commuter Carpark

Transport for New South Wales

Traffic, Transport & Access

Impact Assessment

December 2021

SECAsolution 

Beverly Hills Multi-Storey Commuter Car Park

Traffic, Transport & Access Impact Assessment

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1 Introduction

1.1 Background

Seca Solution was commissioned by Pitt & Sherry on behalf of Transport for New South Wales (TfNSW) to prepare a Traffic, Transport and Access Impact Assessment (TTAIA) for the proposed commuter carpark located near Beverly Hills Station, Beverly Hills. The report will support a Review of Environmental Factors (REF) being prepared by Pitt & Sherry in accordance with Part 5 of the Environmental Planning and Assessment Act 1979.

The proposed commuter carpark forms part of the Transport Access Program (TAP), which is an initiative by TfNSW to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure.

The following assessment is based on a review of:

- The 2018 and 2021 concept plans for the proposed commuter carpark;
- Beverly Hills Station Commuter Car Park Traffic Study prepared by TEF Consulting (October 2018)
- Site visit to the existing Council carpark off Edgbaston Road environs; and
- Travel data and statistics published online by TfNSW (Open Data)

This assessment has been prepared with regards to the Austroads Guidelines and the RMS Guide to Traffic Generating Developments published by Roads and Maritime Services (RMS). This assessment has also utilised the data and modelling provided by the "Beverly Hills Station Commuter Car Park Traffic Study prepared by TEF Consulting".

1.2 Scope of Report

The scope of this report is to review the external traffic arrangements and impacts for the proposed commuter carpark during both construction and operation. This report provides advice on the traffic, transport and access issues including active travel opportunities.

(a) The preparation of the TTAIA requires:

- i. assessment of key environmental impacts as they relate to traffic generated by the project;
- ii. assessment of cumulative impacts during both construction and operation;
- iii. identification of any impact mitigation measures as they relate to the project; and
- iv. assessment of traffic, transport and access impacts.

1.3 Issues and Objectives of the study

The issues relative to the proposal are:

- Assessing the impact on the local road network due to additional construction and operational traffic flows;
- Assessing the impact of the additional parking generated by the additional commuter car parking, during both construction and operation;
- Review impact of removal of timed Council parking;
- Review the access arrangements for the project; and
- Assessing any other transport impacts associated with the project.

The objective of the report is to document the impacts of the proposed development and provide advice on any infrastructure work or measures required to mitigate the impact of the project.

2 Existing Situation

2.1 Site Description and Proposed Activity

Within the site, the Proposal involves:

- construction and operation of the Beverly Hills Commuter Car Park with up to 200 parking spaces as part of the Commuter Car Park Program
- conversion of six car parking spaces on Tooronga Terrace to four Disability Discrimination Act compliant spaces
- widening of the footpath along Tooronga Terrace - from the proposed four Disability Discrimination Act compliant car parking spaces - to King Georges Road to the lift to Beverly Railway Station to satisfy the requirements of the Disability Discrimination Act

The proposal would improve accessibility and amenities for Transport for NSW customers in Beverly Hills.

The Proposal would operate 24 hours, 7 days a week, and would have an Opal card operated boom gate system.

The future operation and maintenance of the commuter car park is subject to further discussions with Sydney Trains, TfNSW and Georges River Council.

TfNSW are currently in discussion with Georges River Council about the potential for access to the commuter car park outside of peak hours i.e. after 6 PM to allow for those visiting the Beverley Hills town centre to use the car park when commuters are generally not using the car park.

Subject to planning approval and detailed design by a contractor that satisfies the condition of the approval, construction is expected to commence in mid 2022 and take around 18 months to complete.

2.2 Site Context

2.2.1 Location

The subject site is located off Edgbaston Road, approximately 60 metres west of Beverly Hills Station and south of the T8 Airport and South Rail Line as shown in Figure 2-1. It is located on a battle-axe block with a single frontage to Edgbaston Road.



Figure 2-1 - Location of the subject site in the context of the local road network (Source: Nearmap)

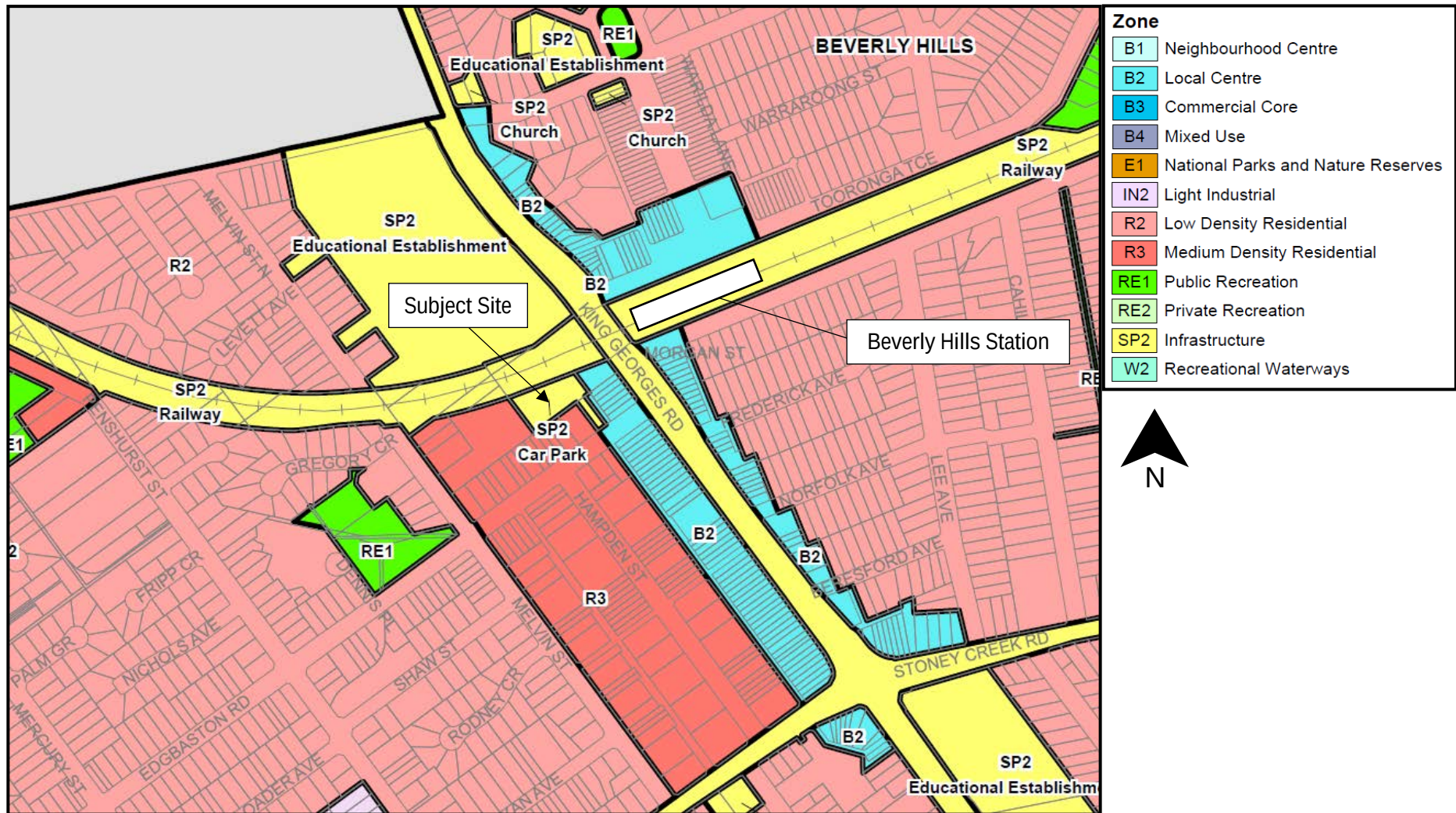


Figure 2-2 - Land Use Zoning (Source: Georges River LEP 2021)

Figure 2-3 – Detailed site location plan



2.2.2 Zoning and Adjacent Land Use

The subject site is located within the Georges River Local Government Area (formerly Hurstville Local Government Area) and has a zoning of SP2 Infrastructure (Car Park).

The surrounding land use consists of several shops and businesses within the local centre off King Georges Road with a mixture of low and medium density residential development to the south and west of the car park.

2.2.3 Existing Station Facilities

Beverly Hills Station currently services the T8 Airport and South Rail Line. It provides the following facilities:

- Opal car top up or single trip ticket machine
- Toilets
- Payphone
- Emergency help point
- Baby change table
- Wheelchair accessible toilet
- Taxi rank
- At-grade commuter car park
- Kiss and ride stopping area

The station is wheelchair accessible with lift and stair access, wheel chair boarding assistance and tactile surfaces.

2.2.4 Current Demands and Patronage

The demands and patronage for the project have been sourced from the Traffic Impact Assessment completed for the project as part of the scoping work. This information has been used for this project to be consistent with the other similar projects across the Greater Sydney area.

Data collected by the Bureau of Transport Statistics indicates that an average of around 5,300 people travelled to/from Beverly Hills Station each day throughout 2014. There has been significant growth in the number of passengers using Beverly Hills Station over the ten-year period to 2014 as outline in Figure 2.4 below, which shows the daily average patronage from 2004 to 2014.

This data has been sourced from the original detailed traffic impact assessment completed for the Beverley Hills Commuter carpark and is consistent with the other similar commuter carpark studies across Greater Sydney. Using this data allows for a consistent approach across all of the projects. It can also be considered that due to Covid issues over the last 18 months or so current data would not be valid for the project.

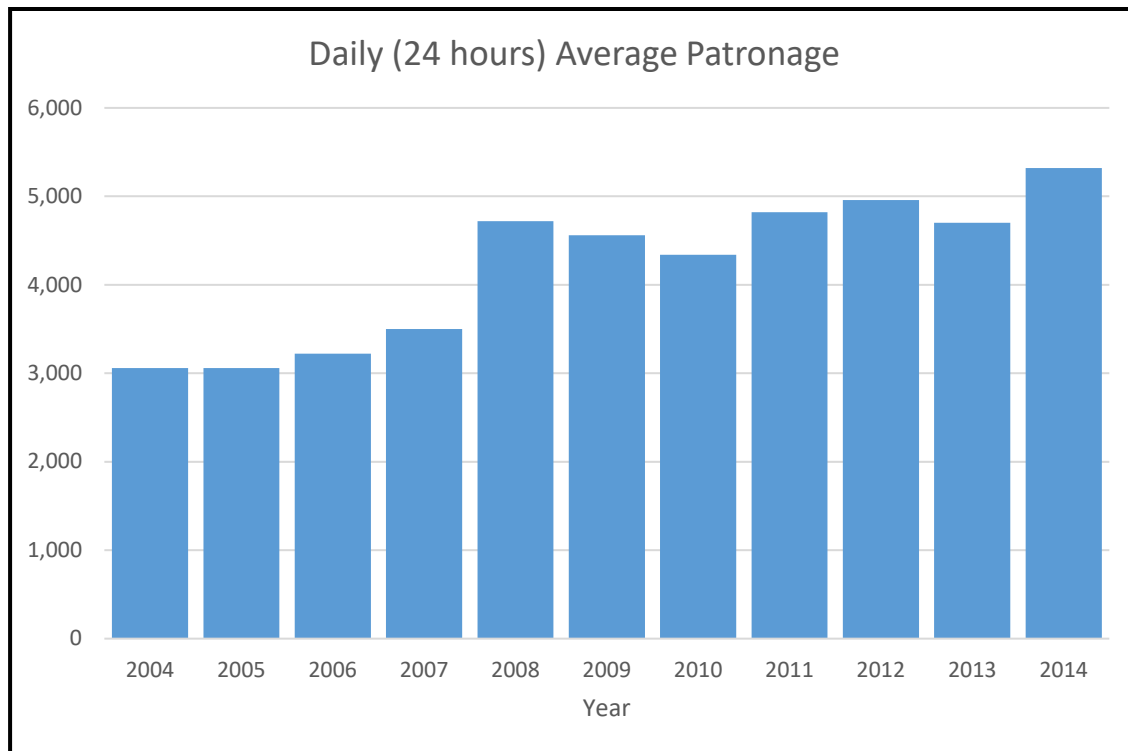


Figure 2-4 – Beverly Hills Station Patronage 2004-2014 (Source: Bureau of Transport Statistics).

The majority of trips to/from Beverly Hills Station occur during the typical commuter peak periods. A review of transport statistics for Beverly Hills Station in 2014 shows that most commuters arrive at the station during the morning (6am - 9:30am) and return at the end of the working day during the afternoon / evening (3pm - 6:30pm) as shown in Figure 2-5.

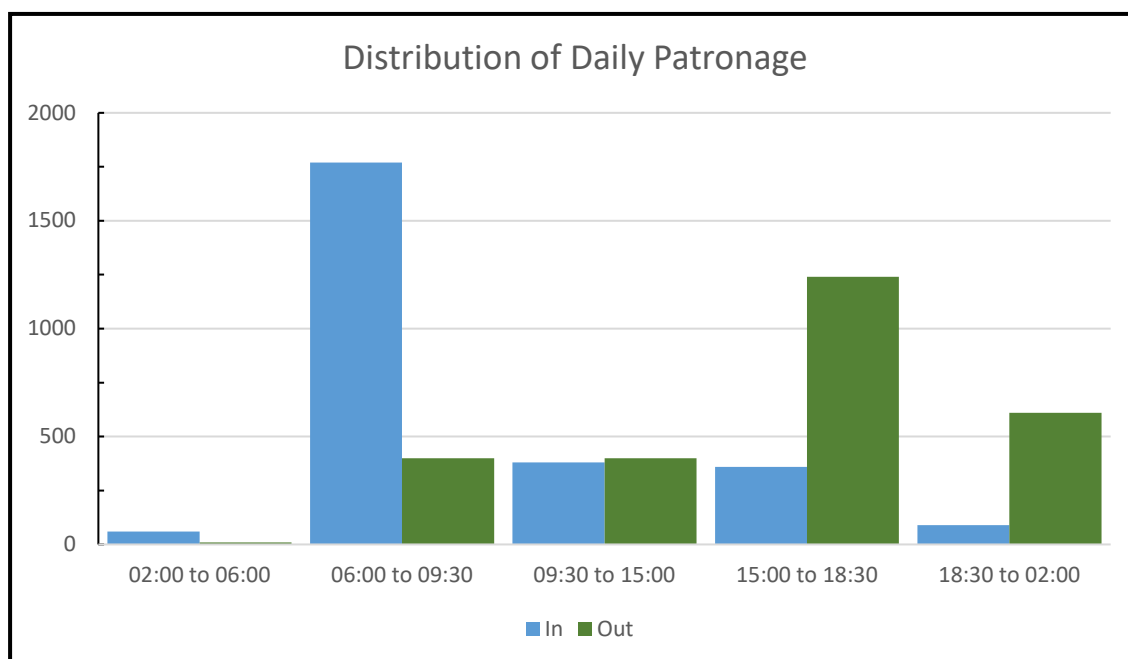


Figure 2-5 – Beverly Hills Station Distribution of Daily Trips over 24 hours (2014) (Source: Bureau of Transport Statistics).

Opal tap on / tap off data is also available for Beverly Hills Station for a one-week period in August 2016, published by Transport for New South Wales. This Opal data provides an indication of the typical distribution of trips through Beverly Hills Station during the typical commuter peak periods and is summarised in Figure 2-6 and

2-7 below. This data is considered valid as the overall trend for the arrival and departure times for commuters is considered to remain constant.

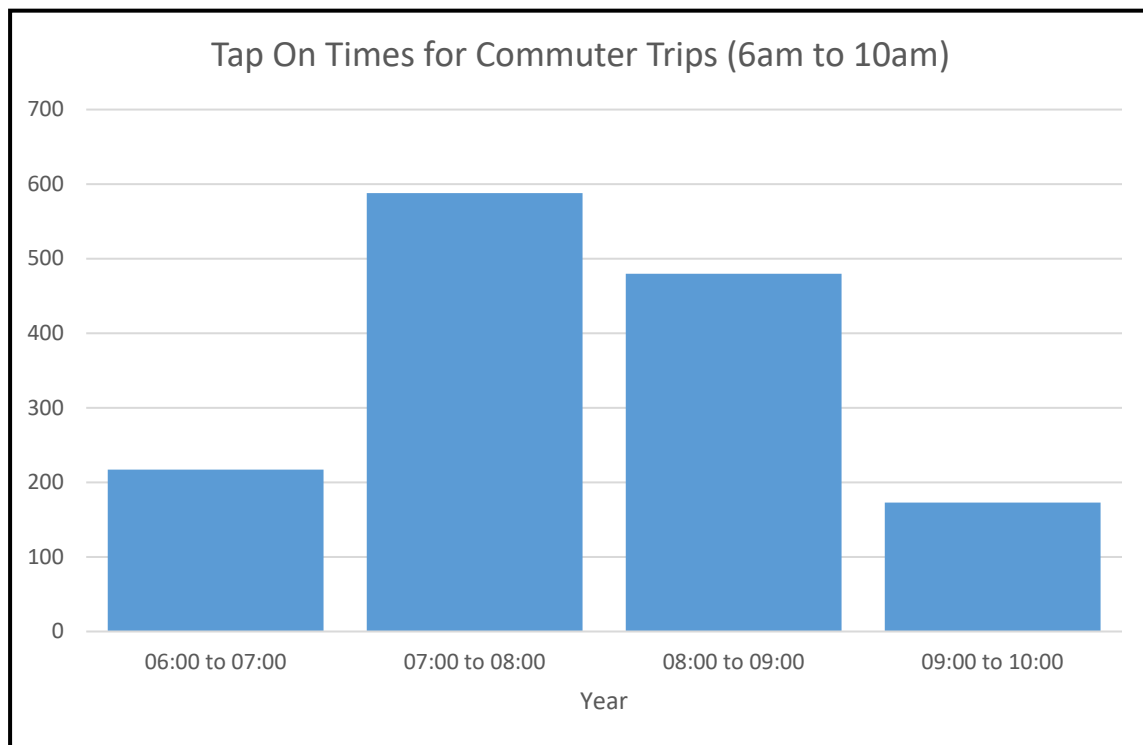


Figure 2-6 – Beverly Hills Station - Tap On trips during AM peak commuter period from August 2016 (Source: Open Data)

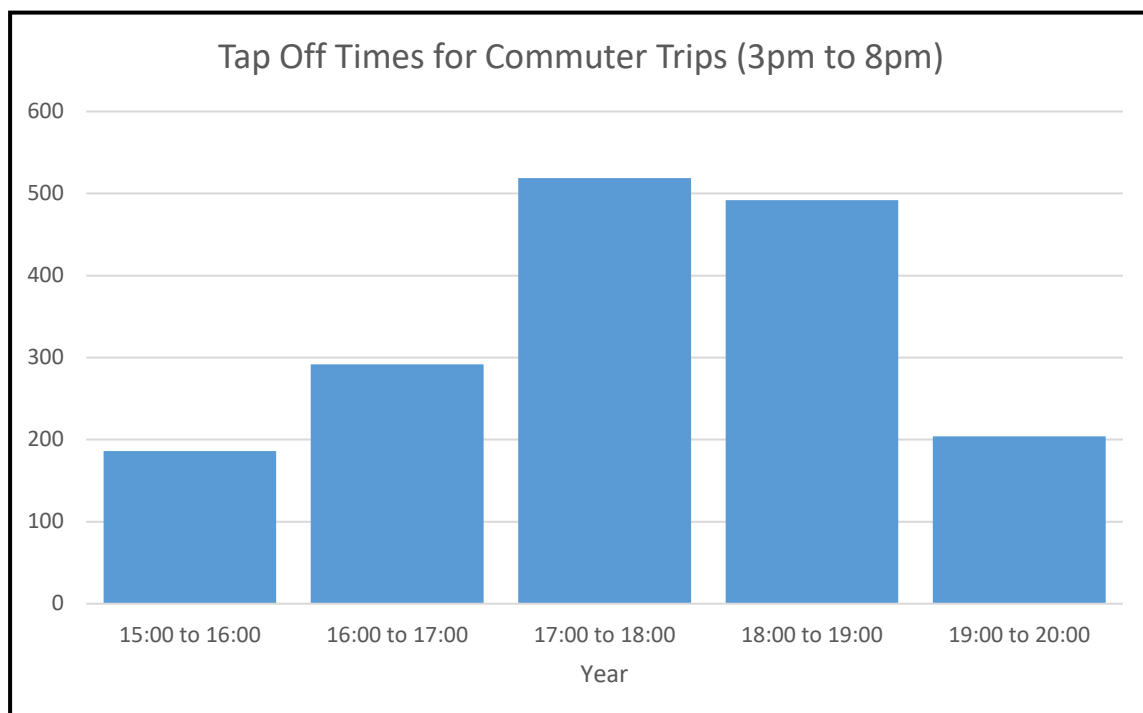


Figure 2-7 – Beverly Hills Station - Tap Off trips during PM peak commuter period from August 2016 (Source: Open Data)

As shown above, approximately 40-45% of commuter trips tap on at Beverly Hills Station during the morning commuter peak period (7am-8am), with 30-35% of commuters returning to the station between 5pm-6pm. Note that the observed commuter peak periods occur slightly later in the evening at 5:45pm-6:45pm. The pattern for the tap on and tap off is considered to correlate with the commuter parking demands at the car park.

2.2.5 Distribution & Travel Mode Commuter Trips

A review of the 2016 Journey to Work data shows that approximately 29% of those who live in the Beverly Hills - Narwee Statistical Area currently travel to work by train with a high percentage of residents travelling to work by car (approximately 55%). Only a small percentage of residents travel to work by bus (<2%), walking (<2%) or cycling (<1%).

The key employment locations for those who live in the Georges River Local Government Area are summarised below (source : Journey to Work data).

Table 2-1 - Key Employment Locations

Local Government Area (LGA)	Percentage of Residents (%)
Sydney	25.8
Georges River	22.6%
Canterbury-Bankstown	7.2%
Sutherland Shire	6.1%
Rockdale	5.1%
Botany Bay	4.3%
Inner West	3.4%

2.3 Site Access

2.3.1 Road Access

Access to the existing Council carpark is provided via a two-way driveway off Edgbaston Road as shown in Figure 2-8 allowing for all turning movements. This driveway also provides access to the adjacent businesses including a gym and car hire premises although no existing right of carriageway exists over this property as described by Section 88B of the Conveyancing Act 1919.



Figure 2-8 Showing existing access to the subject site.

2.4 Pedestrians

Pedestrian access to the existing Council carpark is available from Edgbaston Road (shared access via the driveway) with stairs located at the north-east corner of the site also providing access onto King Georges Road with connectivity to Beverly Hills Station.

To the west along Edgbaston Road there is a villa complex which has an informal pedestrian access between its site and the carpark. This shall be closed as part of the development.

Pedestrian pathways are provided along all local roads in the immediate locality of the site (excluding the unnamed laneway directly opposite the site) offering connectivity between the proposed carpark, nearby shops and to Beverly Hills Station. There is also a pedestrian crossing on King Georges Road approximately 106 metres south of Edgbaston Road as well as via the Beverley Hills railway station platforms.



Figure 2-9 – Existing Pedestrian Facilities (Source: Nemap).

2.4.1 Cycling Pathways

There are limited cycling facilities in the general locality, with no on-road cycling lanes or shared pathways noted in the immediate locality. Figure 2-10 below shows the local cycle paths.

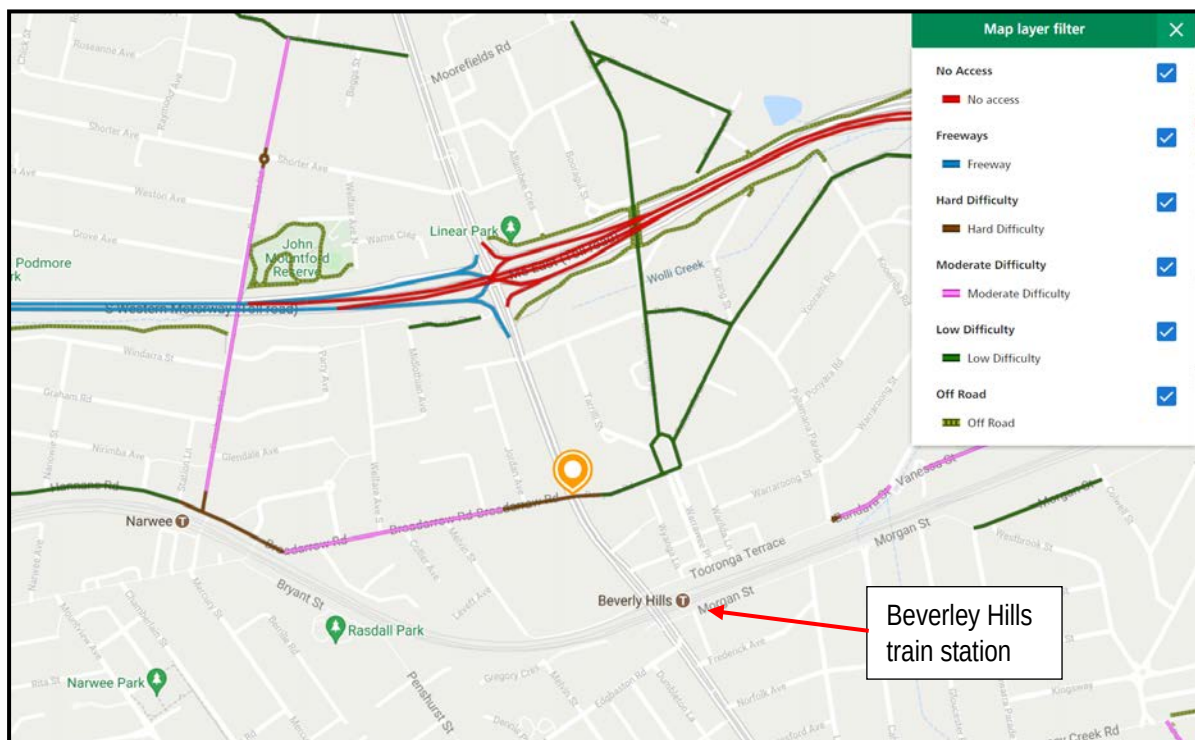


Figure 2-10 – Extract from TfNSW Cycleway Finder web page

The Beverly Hills Town Centre Master Plan April 2020 provides advice on existing and future cycle routes within the centre of Beverley Hills. Figure 37 of the report is reproduced below in Figure 2.11.

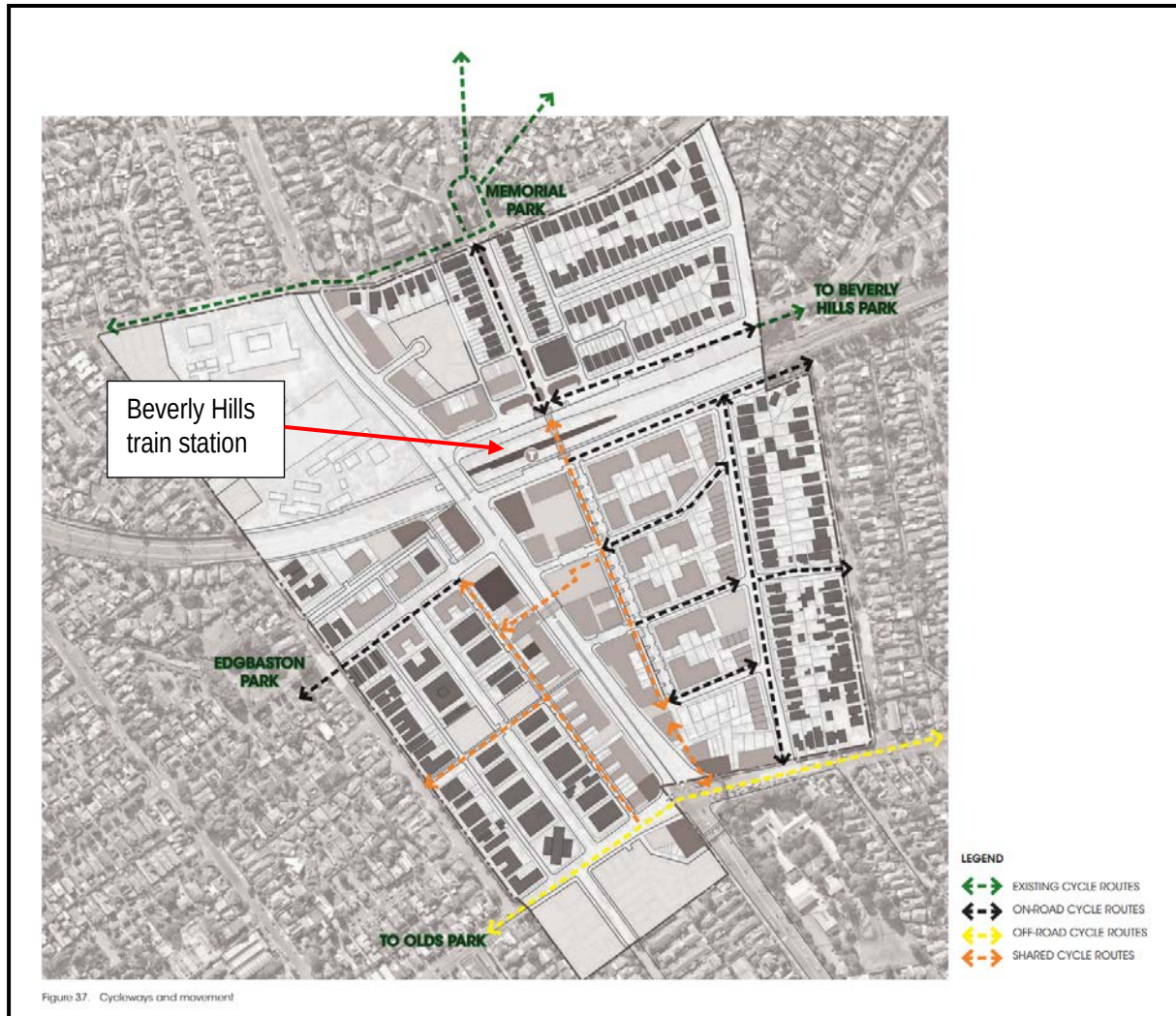


Figure 2-11 – Extract from Beverly Hills Town Centre Master Plan April 2020 showing bike routes

2.5 Road Network

2.5.1 Road Hierarchy

King Georges Road provides the major arterial connection through the locality, forming part of the state road network (MR200) providing access to both the M5 Southwestern Motorway in the north and continues towards Strathfield and beyond, and south to the Princes Highway. In the locality of the site, it provides a six-lane dual carriageway separated by a narrow raised median with additional lanes at intersections to maintain capacity. Street lighting is provided. The posted speed limit of King Georges Road is 60 km/hr with two 40km/hr school zones located to the south of Edgbaston Road and North of Tooronga Terrace.

King Georges Road connects with Edgbaston Road via a signal-controlled T-intersection allowing for all turning movements into Edgbaston Road with left turn only onto King Georges Road.

450 metres south of the station, King Georges Road connects with Stoney Creek Road via a four-way signal controlled intersection allowing for all turning movements. Slip-lanes are provided on the northern and western approaches which are controlled by traffic signals.

Edgbaston Road is a local street in the order of 12 metres wide allowing for a single lane of travel in each direction with kerbside parking to both sides. Street lighting is provided, and the posted speed limit is 50 km/hr.

Edgbaston Road forms priority-controlled T-intersections with both Hampden Street and the adjacent unnamed laneway. Each intersection allows for all turning movements with Edgbaston Road being the priority road.

Melvin Street is a local road similar to Edgbaston Road in that it provides a sealed pavement in the order of 12 metres wide allowing for a single lane of travel in each direction with kerbside parking. Street lighting is provided, and the posted speed limit is 50 km/hr. It connects with Edgbaston Road via a 4-way roundabout and it provides access to an existing railway easement running parallel to the railway line between Melvin Street and the subject site. North of the railway line Melvin Street continues to connect with Broadarrow Road. Hampden Street is a local road similar to Edgbaston Road in that it provides a sealed pavement in the order of 12 metres wide allowing for a single lane of travel in each direction with kerbside parking. Street lighting is provided, and the posted speed limit is 50 km/hr.

Stoney Creek Road functions as a major collector road, forming part of the state road network (MR665) and providing an east-west connection between Bexley (east) and Peakhurst (west). In the locality of the subject site it provides for two lanes of travel in each direction with clearway conditions in the kerbside lane. Additional turning lanes are providing at intersections to maintain capacity and street lighting is provided. The posted speed limit on Stoney Creek Road is 60 km/hr with a 40 km/hr school zone in the vicinity of King Georges Road.

Stoney Creek Road connects with Penshurst Street via a four-way traffic signal-controlled intersection allowing for all turning movements. South of the subject site, Stoney Creek Road forms priority-controlled T-intersections with both Hampden Street and an unnamed laneway (located immediately east), with priority given to Stoney Creek Road. Due to a raised median on Stoney Creek Road, turning movements at Hampden Street are restricted to left in / left out only, and left out only for the unnamed laneway (one way southbound).

Penshurst Street functions as a local collector road, providing an approximately north-south connection between Penshurst (south) and Narwee (north). It provides for a sealed pavement in the order of 12 metres wide allowing for a single lane of travel in each direction (Refer Figure 2-1) with kerbside parking. Street lighting is provided, and the posted speed limit is 50 km/hr.

Penshurst Street forms a four way intersection with Edgbaston Road which is controlled by a single circulation lane roundabout.

An Unnamed Laneway runs parallel and to the east of Hampden Street, between Edgbaston Road and Stoney Creek Road. It provides for one-way travel southbound with an overall width of 5 metres allowing for a single lane of travel. No parking is permitted along the laneway with street lighting provided. Several shops along Kings Georges Road have rear access provided from this laneway typically allowing for staff parking and some customer parking as well as servicing requirements including waste collection.

To the north of the site is the M5 Motorway, forming part of the regional road network connecting with the M7 to the west and through to Sydney airport and links with the M1 Motorway.

The surrounding roads are under the control and care of Georges River Council.

2.5.2 Roadworks

Roads and Maritime Services have modified and extended the clearway hours along King Georges Road and continue to review options to upgrade King Georges Road (between Stoney Creek Road and Forest Road) to ease congestion and improve travel times for motorists. The proposed works including widening of King Georges Road to three lanes in each direction and removing right turn movements in and out of several side roads. Public submissions on the proposal have closed, with the project still in the concept stages.

2.5.3 Traffic Management Works

A review of the Hurstville Development Contributions Plan 2012 and the Georges River Council website indicates that there are proposed Local Area Traffic Management Works for Beverly Hills although no further details are available at this time.

2.6 Traffic Flows

2.6.1 Peak Hour Flows

Traffic survey data has been previously collected for the project the surveys at the intersection of King Georges Road / Edgbaston Road was completed during a typical weekday morning (6am-10am) and afternoon / evening (3pm-7pm) on Wednesday 5th April 2017. It is considered that this traffic data remains valid due to the mature state of the road network in this location which carries high traffic flows across the working day and significant traffic flows during the morning and afternoon peak periods.

As part of the project work, traffic surveys have also been completed at the intersection of Edgbaston Road / Unnamed Laneway during a typical weekday morning (6:30am-10am) on Friday 31st August 2018 and afternoon / evening (4pm-6:45pm) on Thursday 30th August 2018.

Based on these surveys the existing two-way flows on Edgbaston Road (east of Hampden Street) during the typical rail commuter peak periods are 345 vehicles per hour (vph) during the morning (7:15am-8:15am) and 376 vph during the evening (5:45pm-6:45pm). During these same periods, one-way flows along the Unnamed Laneway were 34 vph during the morning and 101 vph during the evening.

Two-way flows on King Georges Road (at Edgbaston Road) are in the order of 4,200 vph during the morning rail commuter peak and 4,600 vph during the evening rail commuter peak period.

Detailed survey data is provided within Attachment A.

2.6.2 Daily Traffic Flows

Peak hour flows typically represents between 8% and 12% of daily traffic volumes. Adopting an average of 10%, this would indicate that daily flows on Edgbaston Road (east of Hampden Street) are in the order of 3,600 vehicles per day (vpd). Daily flows on the Unnamed Laneway could be in the order of 500-1000 vpd.

Given its status as a major arterial route, flows on King Georges Road are consistently high throughout most of the day, with peak hour flows expected to represent significantly less than 10% of the daily flows. This is reflected in Average Annual Daily Traffic (AADT) data available on King Georges Road from a permanent counter to the north of the Southwestern Motorway (Station ID 24026) which indicates daily flows in the order of 65,453 vpd (2018).

Similarly, AADT data is available for Stoney Creek Road from a permanent counter located east of King Georges Road (Station ID 41154). Data from this counter indicates that daily flows on Stoney Creek Road could be in the order of 34,413 vpd (2020).

No formal traffic surveys were completed for Hampden Street however it is considered that flows on this road could be in the order of 1,000-2,000 vpd reflective of its local use only.

2.6.3 Daily Traffic Flow Distribution

It is considered that flows on Edgbaston Road would be reasonably balanced throughout the day. During the morning peak, the survey data shows a strong bias in outbound traffic travelling towards King Georges Road (~70%) with the reverse movement in the afternoon / evening.

2.6.4 Vehicle Speeds and Safety

No speed surveys were completed as part of the survey work however observations on site indicate that vehicles typically travel below the posted speed limit past the site due to delays and congestion associated with the traffic

signals at King Georges Road. Similarly, the narrow alignment of the one-way laneway and interactions with vehicles entering the various shops also control vehicle speeds along this section of the road.

A review of accident data provided by TfNSW indicates that there have been a number of accidents within the general locality of the site, with the majority occurring on King Georges Road mostly involving rear end collisions, consistent with the traffic volumes and congestion and right turning vehicles at intersections.

Other accidents occur at the various intersections along Edgbaston Road although the nature of these accidents vary with no obvious patterns noted.

Although there has been a relatively high number of accidents on King Georges Road this is consistent with the very high traffic volumes along this road corridor. Road upgrades south of this area and changes to clearway provisions should improve congestion and therefore safety. Allowing for this the overall level of road safety is acceptable in this location.

There are no significant safety concerns noted on Edgbaston Road in the immediate locality of the proposed commuter carpark with only a single accident having occurred adjacent to the site entry over the 5 year report timeframe (2016 to 2021) provided by TfNSW.

2.6.5 Existing Site Flows

Traffic surveys completed at the intersection of Edgbaston Road and the Unnamed Laneway opposite the carpark also included traffic surveys to determine the demands associated with the existing Council carpark. The results from this survey show that 34 vehicles entered, and 15 vehicles exited the carpark during the morning peak, with 56 vehicles entering the carpark and 44 vehicles exiting during the evening peak.

It is noted that the current carpark is underutilised with the 3 hour parking limit providing a regular turnover of vehicles throughout the day.

2.6.6 Heavy Vehicle Flows

Edgbaston Road does not provide a through route for heavy vehicles, and this reflects the low demands for heavy vehicle traffic using this road. Based on the surveys completed in this location, heavy vehicles currently represent less than 2% of the total through traffic on Edgbaston Road.

King Georges Road carries a high volumes of heavy vehicle traffic, consistent with its role as the major arterial route through the locality.

2.6.7 Current Road Network Operation

Observations on site indicate that the local roads and intersection (i.e. Edgbaston Road) currently provide an acceptable standard of operation with some delays and congestion during the morning and evening peak periods, particular associated with the nearby traffic signals on King Georges Road.

Traffic volumes on King Georges Road are very high which leads to considerable congestion throughout the day for existing road users. The operation of the classified road network has been assessed as part of the Beverly Hills Station Commuter Car Park Traffic Study, prepared by TEF Consulting (October 2018) which primarily reviewed the potential impacts of the proposed commuter carpark on the operation of the traffic signals at King Georges Road / Edgbaston Road. The results of this modelling indicate that the road network currently provides a satisfactory standard of operation with acceptable delays at the intersection along King Georges Road.

2.7 Parking Supply and Demand

2.7.1 On-street Parking Provision

On-street parking is available on both Edgbaston Road and Hampden Street with typical restrictions associated with driveways and intersections. Most of this parking is uncontrolled although 3P parking restrictions apply at the eastern end of Edgbaston Road.

On-street 90 degree commuter carparking is also provided on both Morgan Street (76 spaces) and Tooronga Terrace (55 spaces) to the west of King Georges Road associated with Beverly Hills Station.

2.7.2 Off-Street Parking Provision

A total of 105 car parking spaces are provided within the existing Council carpark, with 3P time restrictions applying throughout the day. No other public off-street parking is noted in the immediate locality of the site.

2.7.3 Motorcycle Parking

There are no dedicated motorcycle parking spaces noted in the local area.

2.7.4 Parking Demand and Utilisation

Observations of car parking throughout the area indicate a high demand for commuter parking within the immediate locality of Beverly Hills Station, with unrestricted parking on both Morgan Street and Tooronga Terrace being highly utilised throughout the week. This parking is typically occupied by 8:45am with vehicles departing from 4:30pm.

Similarly, there is a high demand for on-street parking along the local roads to the west of King Georges Road associated with local residents and demands for commuter parking.

The existing Council carpark appears to be underutilised at present with many spaces remaining vacant throughout the week. Parking surveys have been completed using Nearmap aerial photographs of the site captured over numerous days dating back to March 2015. These surveys capture a variety of times and days throughout the week and as such, are considered to be representative of the typical utilisation of this carpark.

A summary of the survey results is provided in Table 2-2 below. Note recent aerial photos have not been used due to the impact of Covid restrictions to travel for commuters.

Table 2-2 – Parking Demands

Date	Time of Day	Parked Vehicles	Utilisation (%)
Wednesday 24/02/16	Noon	30	29%
Friday 16/06/16	Morning	47	45%
Thursday 14/07/16	Noon	105	100%
Tuesday 01/11/16	Afternoon	72	69%
Monday 16/01/17	Afternoon	50	48%
Monday 27/03/17	Afternoon	36	34%
Monday 01/05/17	Morning	45	43%
Thursday 19/10/17	Afternoon	50	48%
Tuesday 12/12/17	Afternoon	38	36%
Thursday 15/03/18	Morning	83	79%
Wednesday 11/04/18	Afternoon	55	52%
Tuesday 17/07/18	Noon	87	83%
Tuesday 11/09/18	Noon	51	49%
Tuesday 22/10/19	Noon	46	43%
Wednesday 22/1/20	Noon	82	78%
Friday 28/2/2020	Noon	70	66%
Average		51	56%

The above results demonstrate that the existing Council car park off Edgbaston Road is indeed underutilised with an average of 44% of spaces being vacant throughout the day. Parking demands within this car park are typically higher during the evening associated with demands for the nearby restaurants on King Georges Road.

Surveys of the commuter parking on both Morgan Street and Tooronga Terrace were completed as part of the Beverly Hills Station Commuter Car Park Traffic Study prepared by TEF Consulting with the results of these surveys provided in Attachment A.

2.7.5 Short term set down or pick up areas

No short term set down or pickup areas noted in the immediate locality of the carpark.

A loading zone is located on the southern side of Edgbaston Road opposite the carpark.

2.8 Public Transport

2.8.1 Buses

Four bus services operate throughout the vicinity of the site including:

- Route 452 - Beverly Hills to Rockdale
- Route 493 - Roselands to Rockdale
- Route 450 - Strathfield to Hurstville
- Route 490 - Bankstown to Hurstville

Route 452, 493 and 450 all operate along King Georges Road or Morgan Street to the northeast of the site whilst Route 490 operates along Penshurst Street, around 400 metres to the west.

Figure 2-12 – Bus stops on King Georges Road in the vicinity of the train station

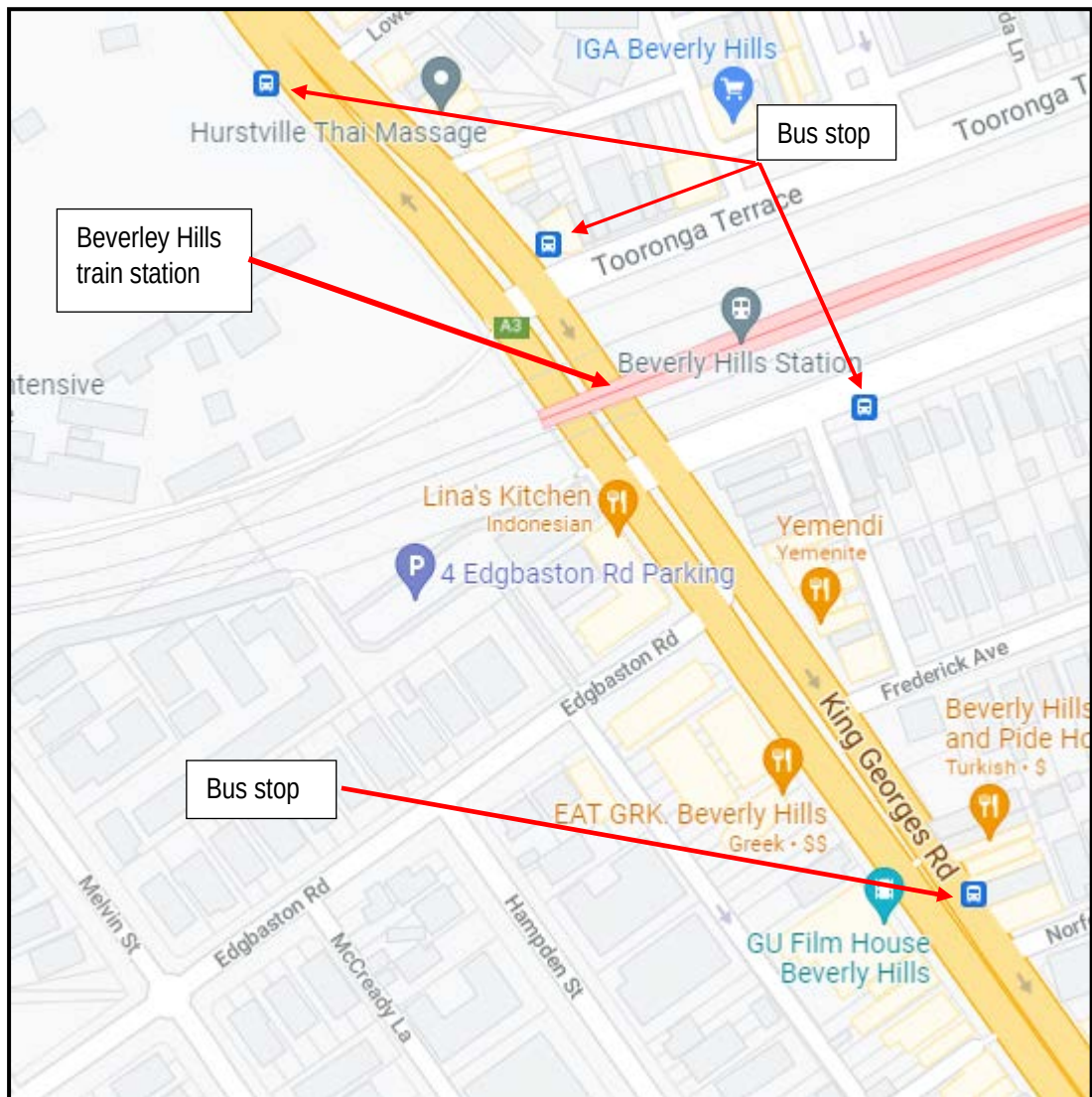
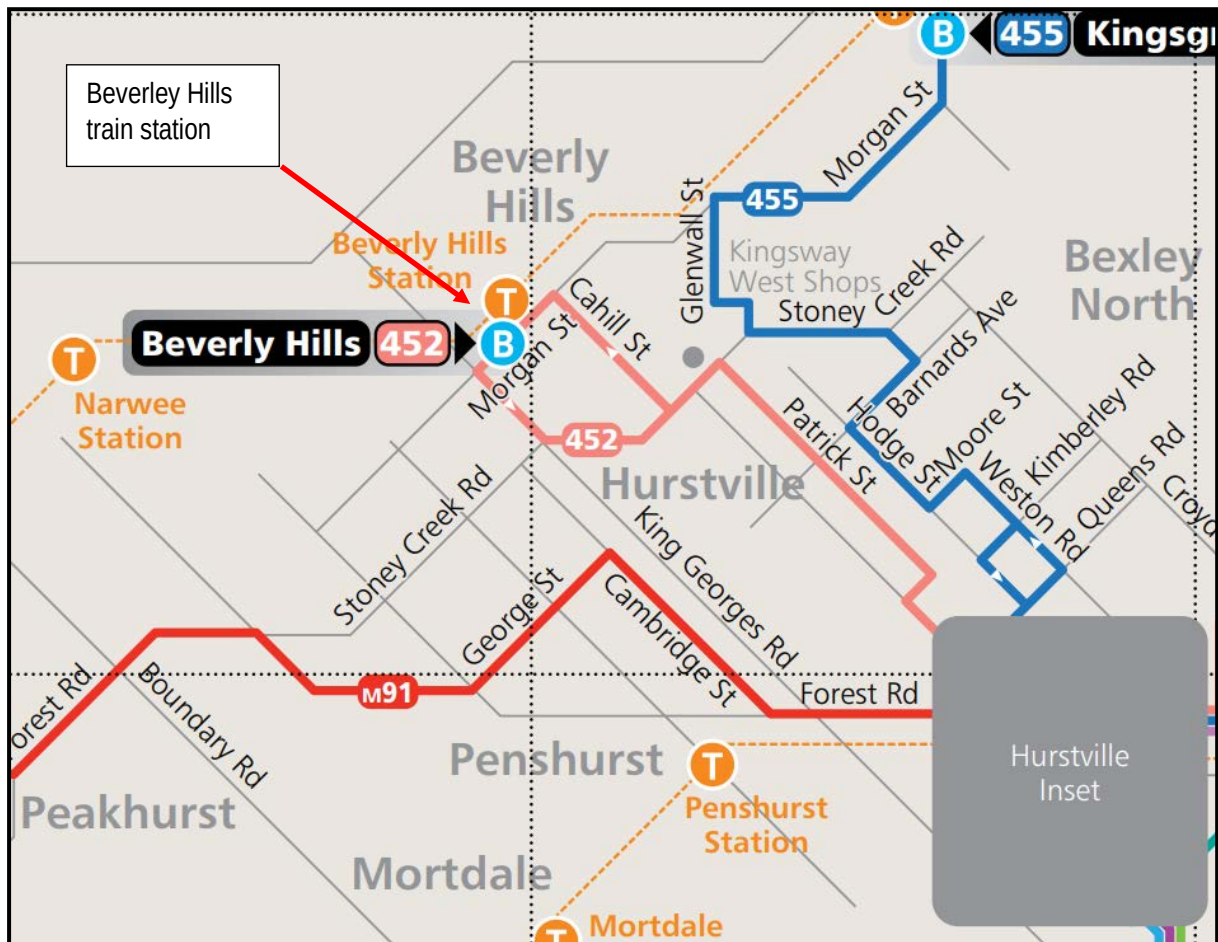


Figure 2-13 – Transport NSW bus routes for Beverley Hills area



3 Proposed Development

3.1 The Development

The proposal allows for the construction of a new car park providing 200 commuter car parking spaces. All access to the carpark shall be provided via an upgraded access off Edgbaston Road. Access shall also be maintained to the existing gym and Right2Drive which adjoin the carpark to the east.

In addition to this, four accessible parking spaces shall be provided within the existing commuter car park on Tooronga Terrace, adjacent to Beverly Hills Station.

3.1.1 Hours and days of operations

The new parking facility will operate 24 hours per day, 7 days per week with peak use expected to be between 6:00am and 7:00pm Monday to Friday associated with typical commuter parking demands.

3.2 Access

3.2.1 Driveway Location

Vehicle access to the proposed car park will be provided via an upgraded access off Edgbaston Road allowing for entry and exit movements and shall be designed in accordance with AS2890 requirements.

During the morning peak period, traffic will be entering the site having turned into Edgbaston Road from King Georges Road or otherwise having approached from the west. Given the proximity of the site entry to King Georges Road, and the potential for queuing across the site frontage, it is considered that 'Keep Clear' line markings shall be required across the access driveway to ensure that access for a right turning vehicle entering the site is not blocked by queues on Edgbaston Road. This will ensure that delays for vehicles turning right into the site are minimised and therefore reduces the potential for queues at the site entry to impact upon westbound traffic on Edgbaston Road.

Consideration should also be given to removing the existing parking controls and loading zone on Edgbaston Road (between the site access and King Georges Road) to ensure that westbound traffic can pass around an occasional vehicle propped on Edgbaston Road whilst waiting to turn into the site, thus preventing queues from forming which could impact traffic entering Edgbaston Road from King Georges Road.

All egress movements shall be permitted onto Edgbaston Road, consistent with the existing car park.

3.2.2 Sight Distances

Sight distance requirements for an access driveway are specified by *Australian Standard AS2890.1:2004 Off-street Car Parking*, which requires a minimum sight distance of 45 metres for the posted speed limit of 50 km/hr along Edgbaston Road.

Edgbaston Road provides a mostly straight and flat road alignment which ensures that there are no impediments to visibility for drivers approaching the site from either direction or exiting onto Edgbaston Road. As part of the site work, sight distances at the proposed egress driveway have been reviewed with the following comments provided:

- Sight distances looking west along Edgbaston Road extend more than 50 metres for a vehicle exiting the site, which exceeds the above requirements.
- The egress driveway is located approximately 40 metres from the intersection at King Georges Road, and whilst this is less than the 45 metres required by AS2890.1, it is noted that vehicles turning into Edgbaston Road would be travelling well below the posted speed limit of 50 km/hr. The available sight distance in the order of 40 meters ensures adequate distance for a driver to observe a vehicle exiting

the site and slow down or stop accordingly, and also exceeds the minimum stopping sight distance for vehicles negotiating this corner at up to 40 km/hr (as specified by *Austroads Guide to Road Design, Part 3 - Geometric Design*).

Sight distances at the proposed egress driveway are therefore deemed to be appropriate and consistent with the requirements of AS2890.1:2004. They are also consistent with the existing site access that operates in a safe manner.

3.2.3 Service Vehicle Access

The development would require minimal service vehicle access, with the only servicing being for lighting, lift, and storm water and other routine maintenance. The lighting and lift maintenance would have minimal requirements and typically only require access for a small van such as a Toyota HiAce. These vehicles will be able to park within the car park as required during maintenance activities.

The stormwater maintenance truck would only require access to the ground floor level of car park area. No dedicated service area is required for the car park. Service access will be maintained along the northern boundary.

3.2.4 Queuing at entrances

Traffic associated with the commuter car parking spaces will be predominately inbound during the morning peak and outbound during the evening peak, consistent with the existing travel patterns of commuters at Beverly Hills Station. Inbound traffic during the morning period would be spread out with commuter arriving at varying times depending upon their hours and location of employment, desired travel time and the amount of time allowed upon arrival prior to their service departing. The spread of arrivals reduces the peak demands for vehicles entering the carpark, thus also reducing the potential for queues to form at the site entry.

Based on the existing travel patterns for Beverly Hills Station (Section 2.2.4), up to 45% of commuters could be expected to arrive in the morning commuter peak hour, equating to up to 90 vehicles.

During the evening peak, the varying train service times and different working hours for commuters also creates a spread of departures from the site. Departures are expected to occur in small groups following the arrival of a train service to Beverly Hills Station with a small number of vehicles departing between services, typically being those who were checking their phone or completing errands at the nearby shops prior to departing. In the order of 35% of commuters could be expected to depart during the evening commuter peak period, which equates to 70 vehicles.

TfNSW are currently in discussion with Georges River Council about the potential for access to the commuter car park outside of peak hours i.e. after 6PM to allow for those visiting the Beverley Hills town centre to use the car park when commuters are generally not using the car park.

With regards to queuing at the carpark entry, AS2890.1 provides advice for determining the length of queuing required depending upon the capacity of the carpark and the expected demands. For a carpark with more than 100 spaces, the minimum queuing length is given as:

- 3 cars for the first 100 spaces;
- 2 cars for the next 100 spaces; and
- 1 car per 100 spaces thereafter or part thereof.

For the capacity of 200 spaces this equates to a minimum queuing area of 5 spaces. It is noted however that these rates are based on a peak hourly inflow volume of 75% of the parking capacity (i.e. 150 vehicles). Given the distribution of arrival times and varying work hours of commuters, it is considered that this level of demand is unrealistic.

The carpark layout shall provide for entry and exit movements and in accordance with AS2890.

3.2.5 Current access compared with proposed access

The proposed upgraded access shall replace the existing access driveway off Edgbaston Road and will allow for access to the adjacent lots to the east.

3.2.6 Access to Public Transport

Pedestrian connections shall be provided internally within the carpark to enable access to the existing pedestrian stairs near King Georges Road in the north-east corner of the site. These stairs provide direct access to Beverly Hills Station.

Lift access is available to Beverly Hills Station on the eastern side of King George Road. An accessible path of travel to Beverly Hills station is provided from the commuter car park off Tooronga Terrace with footpaths along Tooronga Terrace and King Georges Road. This footpath also provides connection to the proposed accessible commuter car parking spaces located off Tooronga Terrace.

3.3 Circulation

3.3.1 Pattern of circulation

Access to the site shall be provided via a driveway off Edgbaston Road with the internal site layout allowing for a series of one-way ramps to provide access between the various parking levels.

All vehicles will be able to enter and exit the site in a forward direction.

3.3.2 Internal Road width

The car park layout including the ramps and circulation roads designed in accordance with AS2890 allowing for one-way and two-way traffic movements as appropriate. This requires a minimum width of 3 metres between kerbs for one-way ramps and circulation roads with an additional clearance of 300mm required when there are vertical obstructions to one-side.

Driveways shall be at least 3 metres wide for both entry and exit lanes.

3.3.3 Internal Bus Movements

No requirement to accommodate internal bus movements within the carpark.

3.3.4 Service Area Layout

No dedicated service area would be provided for the development. Service vehicles can park within the car park as required and would typically only be small vans such as a Toyota HiAce. Access will be maintained along the northern boundary for servicing.

3.3.5 Pedestrian and Bicycle Facilities

An important consideration for the project is the provision of suitable pedestrian connections to Beverly Hills Station. Connections shall be provided to the pedestrian stairs at King Georges Road to the north-east of the site with lifts and stairs provided access between the various parking levels. Pedestrian path upgrades to Tooronga and King Georges Road to achieve compliance and a pathway from the DDA parking to the station will be provided.

No bicycle facilities are proposed as part of these works.

3.4 Layout of the Carpark

At present, the layout of the proposed commuter carpark has not been developed, with the final layout to be confirmed as part of the detailed design process. The car park layout shall be designed in accordance with AS2890.

For commuter car parking (Class 1 parking), AS2890.1 requires parking spaces to provide minimum dimensions of 2.4m wide by 5.4m long with parking aisles being a minimum of 6.2 metres. The location of obstructions such as columns shall be in accordance with the design envelope around parking spaces shown in Figure 3-1 below.

4 Transportation Analysis

4.1 Traffic Generation

The commuter car park would generate a strong demand for inbound traffic during the morning peak period and the reverse outbound traffic demand in the late afternoon / early evening, associated with the commuter peak periods.

For the inbound traffic movements, commuters would typically arrive at the carpark from around 6:30am, with the majority of arrivals expected to occur between 7:00am and 8:30am, consistent with the surveys of the existing travel patterns for commuters at Beverly Hills Station. Approximately 45% of commuters are expected to arrive during the morning commuter peak hour (7am-8am), corresponding with 90 vehicles inbound spread across this period.

Commuters would typically be expected to return to their vehicle between 4pm and 7pm, depending upon their start time and hours worked. In the order of 35% are expected to exit the car park during the afternoon commuter peak period (5:45pm-6:45pm), giving 70 vehicles outbound.

Over a typical day the commuter car park would generate demands in the order of 200 vehicles inbound and 200 vehicles outbound, assuming full utilisation of the commuter car parking and no changeover of vehicles throughout the day. These demands would relieve the demands for commuter parking throughout the local area, with commuters being able to access convenient parking in the new facility rather than competing for parking on the surrounding roads, particularly to the west of King Georges Road. The balance of parking would be expected to accommodate future increases in demands for commuter parking associated with increased growth in the surrounding area and increased modal share for rail services as assessed by the detailed traffic impact assessment completed for the project by TEF Consulting.

Overall, the proposed car parking structure could therefore generate in the order of 75 *additional* vehicle movements during the morning peak, 55 *additional* movements in the evening peak and in the order of 150 *additional* trips per day compared to the existing car park.

The DDA parking on Tooronga Terrace will be provided within the existing commuter parking spaces in this location and as such will not generate any additional traffic demands.

4.1.1 Daily and Seasonal Factors

The nature of the commuter demands means that the car park would be highly used Monday through to Friday, with lower use over the weekend. There would be minimal seasonal demands, although there are typically reduced demands over Christmas / New Year periods and during school holidays.

4.1.2 Pedestrian Movements

There would be a high demand for pedestrian movements between the commuter carpark and Beverly Hills Station. Most of these demands for pedestrian movements would occur during the morning and late afternoon / early evening commuter peak periods.

Adopting an average car occupancy rate of 1.2 persons per vehicle, the commuter carpark could create demands for up to 240 pedestrians during the peak periods, with most of these demands expected to be to / from Beverly Hills Station. These movements would replace some of the existing pedestrian movements elsewhere within the road network associated with the demands for commuter parking on the local roads.

Suitable pedestrian connections shall be provided within the site to enable access to the pedestrian stairs at King Georges Road with no requirement for commuters to cross King Georges Road or local roads to access Beverly Hills Station.

4.2 Traffic Distribution and Assignment

4.2.1 Origin / destinations assignment

Consistent with the traffic study prepared by TEF Consulting, it is expected that the proposed commuter car park will appeal mostly to those travelling to / from the west of King Georges Road, with existing commuter parking on Morgan Street and Tooronga Terrace appealing to those travelling to / from the east. As such, it is anticipated that in the order of 70-80% (use 70%) of commuter demands would have an origin / destination to the west of King Georges Road with the balance (30%) having an origin / destination to the east via King Georges Road.

Of the 70% with an origin / destination to the west:

- All vehicles will enter the car parking via a left turn in and exit via a right turn onto Edgbaston Road.
- Vehicles then disperse over several routes depending upon the origin or destination of their journey with most vehicles travelling along either Edgbaston Road or Melvin Street. Minimal vehicles would travel along the Unnamed Laneway or Hampden Street with these roads allowing for left turns only onto Stoney Creek Road.

Of the balance (30%):

- 20% of traffic would have an origin / destination north along King Georges Road. These vehicles would enter the site via a right turn having turned right onto Edgbaston Road from King Georges Road, and would depart via the reverse route.
- 10% of traffic would have an origin / destination south along King Georges Road or east via Stoney Creek Road. These vehicles would typically enter the site via a right turn having turned left into Edgbaston Road off King Georges Road. Vehicles departing the car park would exit directly into the Unnamed Laneway or may turn right onto Edgbaston Road then left turn into Hampden Street to connect with Stoney Creek Road. Due to difficulty turning right onto King Georges Road for vehicles using the Unnamed Laneway to connect with Stoney Creek Road (need to cross four lanes when turning left onto Stoney Creek Road), most vehicles with a destination to the would be expected to use Hampden Street to access Stoney Creek Road.
 - For the purpose of this assessment, it is assumed that 6% of vehicles would use Hampden Street to connect with Stoney Creek Road;
 - The balance (4%) would therefore use the Unnamed Laneway to connect with Stoney Creek Road.

Whilst there may be some local demands from residences located to the immediate south or west of the site, the majority of these trips are expected to involve walking to the Beverly Hills Station and local shops rather than private vehicle trips.

The following distribution has therefore been assumed:

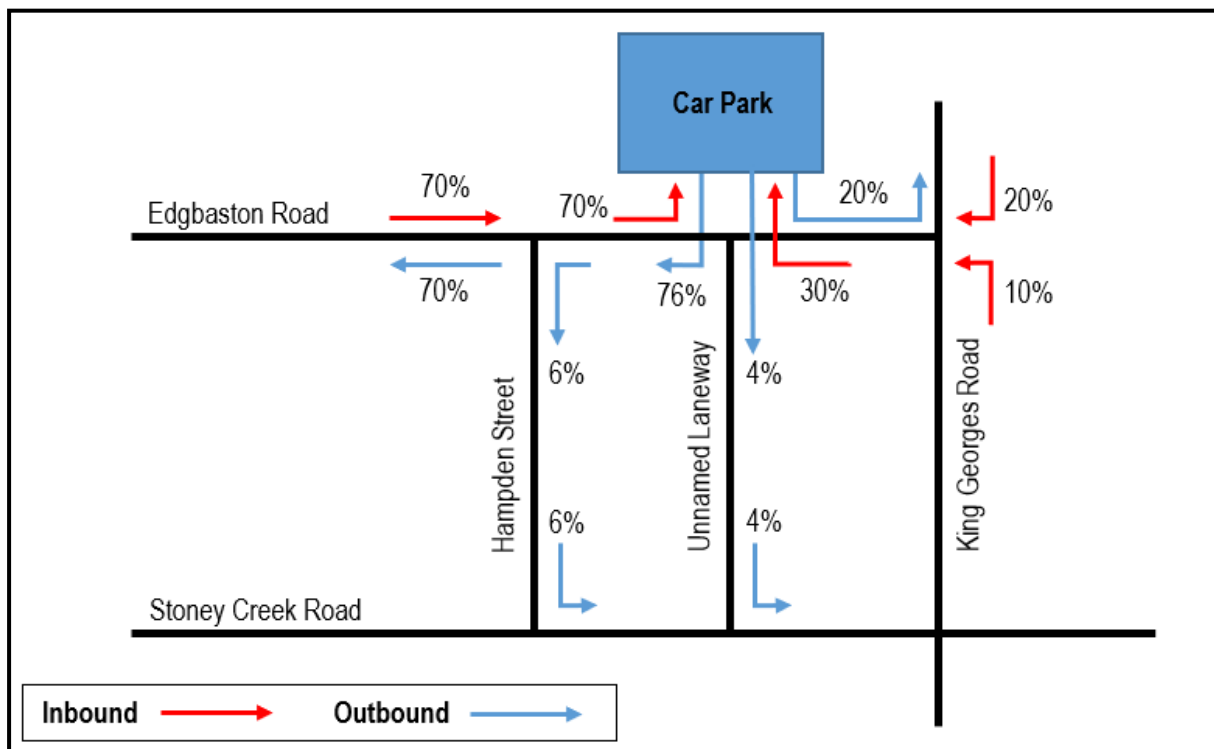


Figure 4-1 - Adopted Traffic Distribution

Applying this distribution to the additional traffic generated by the new commuter carpark gives the following allocation of trips on the local road network.

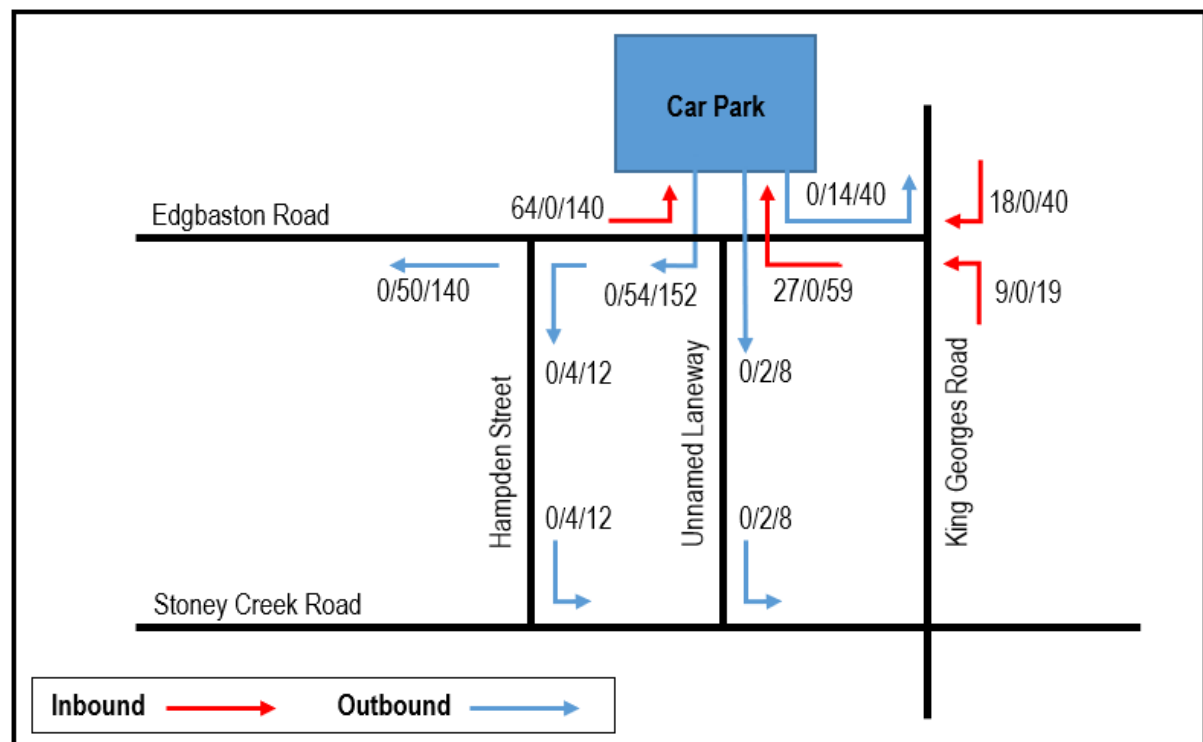


Figure 4-2 - Distribution of additional trips generated by the commuter car park. (AM / PM / Daily)

4.3 Impact on Road Safety

The proposed commuter carpark would see increased traffic flows on Edgbaston Road associated with vehicles entering or leaving the site. Many of these additional demands would be vehicles that already travel to access Beverly Hills Station, however, currently park elsewhere due to the availability of commuter parking in the immediate locality of the station and uncontrolled parking on the surrounding roads. As such, the overall increase in traffic on the broader road network would be minimal, with the proposed car park likely to see a redistribution of the existing traffic demands from the surrounding local roads which would instead access the new commuter carpark off Edgbaston Road.

Most of the demands for the new carpark are expected to be from the west of King Georges Road, and this could reduce the number of vehicles crossing King Georges Road to access exiting commuter car parking off Morgan Street and Tooronga Terrace. Similarly, the availability of additional commuter parking to the west of King Georges Road could reduce competition for commuter parking along these roads, potentially reducing the demands for vehicles crossing King Georges Road to seek parking on Edgbaston Road, Hampden Street and surrounds.

As such, the proposed carpark is expected to have a negligible impact to road safety on King Georges Road.

Vehicle speeds in this location would be below the posted speed limit due to the interactions with driveways and intersections, as well as congestion in the local area associated with traffic signals at King Georges Road. Sight distances at the proposed driveway off Edgbaston Road exceeds the authority requirements and with recommended improvements to the road frontage, will have an acceptable impact upon road safety.

4.4 Impact of Generated Traffic

The commuter car park is not a generator of traffic in its own right, but rather represents an end point for commuter traffic associated with Beverly Hills Station and as such is ancillary to this. Therefore, the new commuter car park is not expected to increase local traffic, but would rather ease parking congestion in the general locality of Beverly Hills Station. The new car park would provide a convenient end point for vehicles from the west of King Georges Road, which currently compete for parking on Morgan Street or Tooronga Terrace.

The key impact of the proposed commuter carpark would therefore be a redistribution of local traffic, which would see increased demands for vehicles accessing the carpark off Edgbaston Road. Given the distribution of residential dwellings to the west of the car park and the number of potential routes available for drivers to connect with Edgbaston Road, it is considered that no one single route will appeal to drivers. This distribution reduces the impact of additional traffic on any given street and is unlikely to have a noticeable impact to existing road users.

The *RMS Guide to Traffic Generating Developments* does not provide limits on daily traffic volumes. It does however provide performance standards for assessing the capacity of a local roads based upon the maximum peak one hour traffic volumes.

For Edgbaston Road, which operates as a collector street, *Austroads Guide to Traffic Management* indicates a typical one-way mid-block capacity of 900 vph (kerb lane adjacent to parking). The existing traffic volumes on Edgbaston Road together with additional traffic associated with the commuter carpark would be well below the indicated capacity of 900 vph, and therefore the proposed commuter carpark will have an acceptable impact upon the operation of this road.

4.4.1 Peak Hour Impact on Intersections

The Beverly Hills Station Commuter Car Park Traffic Study (TEF Consulting) has reviewed the impact of the proposed commuter carpark on the various intersections along King Georges Road. This assessment acknowledged that whilst 70-80% of traffic associated with the new carpark is expected to have an origin / destination west of King Georges Road, this would see minimal demands for traffic accessing King Georges Road. To ensure a robust assessment, 50% of traffic was assumed to have an origin / destination to the east of

the carpark, which sees increased demands for vehicles to access King Georges Road compared to what is reasonably expected for the new car park. It is also noted that this assessment had allowed for up to 440 commuter car parking spaces within the new parking facility, compared with 200 now proposed and as such the impacts would be lower.

Overall, this assessment concluded that the proposed carpark can be supported by the various intersections along King Georges Road with satisfactory levels of service during both peak periods at both Edgbaston Road and Morgan Street.

Notwithstanding this, the proposed carpark is also expected to see some increased demands at the roundabout controlled intersection of Edgbaston Road / Penshurst Street. Observations on this indicate that this intersection currently provides a satisfactory standard of operation and would have adequate capacity to support the potential increased demands for vehicles associated with the new commuter carpark with no significant change to its current operation.

Given the number of potential routes which vehicles could use to access Edgbaston Road, the impact of the additional demands would be dispersed across several intersections, which would further reduce the potential impacts associated with the development. As such, it is considered that no single intersection would be significantly impacted upon by this development, with no further assessment required.

5 Impact of Construction Traffic

The construction work will have a short-term impact upon the local road network, with the majority of the works able to be contained on site. The proposal has been assessed against a maximum project extent which would allow a likely five level multi-storey car park positioned within an eight level maximum project extent, being up to three basement levels and up to five above ground levels. If the option is pursued with the basement parking levels then there will be impacts associated with the excavation and increased removal of material off site.

The construction work is expected to continue for a duration of 18 months and could require up to 63 staff on-site during the peak construction periods such as concrete pours and as a low as 15 during the enabling works phase. There shall be a requirement for a crane to be used on site during construction. There will be periods of intense work on site associated with the concrete pours for the various floors which would be constructed, involving 36 concrete truck movements to and from the site per level. These will be separated by 2 weeks to allow for the formwork to be removed and replaced ready for the next level of concrete pour. For the balance of the works on site, the extent of heavy vehicle movement will be much lower and associated with material drop off.

If the option is pursued to provide the basement levels of parking, then this will require between 20 and 45 trucks per day unladen entering the site and the same volume then leaving the site full. These would be similar in volume to the truck numbers for the concrete pour above and potentially 9 more trucks per day at full operations.

Whilst construction access is to be provided via the existing access connection to Edgbaston Road, a second access option has been identified along the railway corridor between the subject site and Melvin Street (refer Figure 2-3 above). During the removal of material, this access would permit one-way truck movement only and allow for empty trucks to enter the site off Melvin Street with these trucks then exiting laden via Edgbaston Road. This access corridor connects with the stub end of Melvin Street and is currently used for maintenance work in the rail corridor with a locked gate. Drivers entering here can do so in a safe and appropriate manner and a would include a Construction Traffic Management Plan to safely manage these truck movements to ensure trucks can enter and the swept paths movements can be accommodated with additional parking controls here as required. It is noted that this access is currently used for maintenance work which requires some truck access movements.

This access via Melvin Street would be used over a 12-16 week timeframe and will utilise empty trucks only along this road. Melvin Street is a dead-end road with very low traffic demands accordingly. The empty trucks travelling along this road shall have a negligible impact upon the operation of this road and minor delays for the existing road users.

The use of this access along the railway corridor is subject to detailed design and review and approval by the relevant authorities.

Melvin Street connects with Edgbaston Road via a 4-way roundabout controlled intersection, allowing for all turning movements. Construction traffic using this access corridor will continue to access the site via the intersection of King George Road and Edgbaston Road and would travel along Edgbaston Road between Melvin Street and King George Road only.

The project also requires works on Tooronga Terrace adjacent to the Beverly Hills Station. This would be created by conversion of six existing commuter parking spaces. Works would include line marking and signage associated pavement work to ensure accessibility requirements are achieved, where required. There will be footpath upgrades between the new accessible parking spaces and the lift to Beverly Hills Station as required to achieve DDA and DSAPT compliance. No trees would be removed. Removal of a small amount of landscaping and groundcover may be required. This work shall have a minor impact for traffic and pedestrian movements in this location will be managed as part of the construction work to maintain safe pedestrian movements.

No road closures are anticipated throughout the construction phase although traffic control will be required on Edgbaston Road to enable construction of the driveway access following completion of the main parking structure. Details of any traffic control requirements shall be included within a construction traffic management plan to be prepared during the detailed design stage of the project in consultation with the road authorities. This would include any requirement to providing temporary No Parking zones on Edgbaston Road and Melvin Street to accommodate the swept path movements of the delivery vehicles.

Demolition & Construction Hours would be between 7am-6pm, Monday to Friday and between 8am-1pm on Saturdays. No demolition or construction work would be carried out on a Sunday or Public Holiday. Major deliveries would be scheduled outside of the peak hours on the weekdays in line with EPA Guidelines.

Work may be undertaken outside these hours where the following occurs:

- The delivery of fill or material may occur outside these hours if required by the Police or other authorities;
- Council provides permission for working out of hours;
- It is required in an emergency to avoid loss of life, damage to property and / or to prevent environmental harm;
- The work is approved under a Construction Noise and Vibration Management Plan;
- Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

All works on site will be governed by the relevant EP&A rules as well as TfNSW and Council requirements.

5.1 Construction Traffic Generation

5.1.1 Heavy Vehicles

During construction, the number of heavy vehicles accessing the site could be up to 90 heavy vehicles per day 2-way, with this peak demand occurring if the basement level of parking is provided and 72 trucks per day 2-way associated with the concrete pours. Heavy vehicle movements would be distributed throughout the day and would typically be scheduled to avoid local traffic peaks, including the school and commuter peak periods. Vehicles movements would adhere to the proposed construction traffic routes described in Section 5.2.

It is proposed that all construction materials shall be stored on site with no requirement for a work zone on Edgbaston Road.

5.1.2 Light Vehicles

Up to 63 construction workers may be expected to be on site during peak periods such as concrete pours, with 15 staff during the initial stages of construction and in the order of 25 staff near completion. Applying a car occupancy of two persons per vehicle, this could see in the order of 32 staff driving to the site each day at the busy periods and less for the balance for the construction phase.

It is expected that workers shall arrive to commence work at the start of the day (6.30am-7.00am) and depart at the end of the construction working day, with the majority leaving between 3pm-3:30pm and all staff off site by 6.00pm. As part of the management of the construction work, staff will be encouraged and supported to use public transport to access the construction site rather than private motor vehicles. This could see the number of vehicles travelling to the site being considerably lower than 25 vehicles per day.

5.1.3 Total Construction Traffic

The construction traffic generation for the site is summarised in Table 5-1 below.

Table 5-1 Peak Hour Construction Traffic Generation

Construction Traffic	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Heavy Vehicles	0 (to avoid commuter peaks)	0	0	0
Light Vehicles (workers)	<25	0	0	<25
Total	<25	0	0	<25

5.1.4 Construction Traffic Routes

Construction traffic shall travel to the site area via King Georges Road, which forms part of the state road network with connections to both the M5 South Western Motorway and Princes Highway to the south.

All traffic travelling to the site shall be instructed to use Stoney Creek Road and Penhurst Street to access Edgbaston Road. This will ensure that all vehicles approach the site from the west, minimising potential delays at the site entry associated with vehicles waiting to turn right or reverse into the site. The intersection of Stoney Creek Road / Penhurst Street is signal controlled and therefore can provide for right turn movements in safe and appropriate manner. With vehicles approaching from the east, any queues which form due to delays associated with a vehicle reversing into the site will occur on the approach to the traffic signals and will therefore will not impact upon the operation of King Georges Road.

Vehicles exiting the site will be able to access King Georges Road directly from Edgbaston Road or may otherwise use Melvin Street / Stoney Creek Road to access King Georges Road for travel southbound. Both intersections on King Georges Road are signal controlled which allow for heavy vehicle movements in a safe and appropriate manner.

Due to the constrained nature of the site, vehicles may need to reverse into the site off Edgbaston Road, especially during concrete pours and large delivery vehicles with no turning available within the site, which would require eastbound vehicle movements on Edgbaston Road to be stopped whilst this movement occurs. The use of the entry for vehicles off Melvin Street would potentially eliminate this reversing requirement. A Traffic Control Plan (TCP) will be required to control traffic movements and maintain safety during the construction works and shall include details of any road traffic control personnel required during the construction phase.

A detailed Traffic Management Plan and Traffic Control Plan will be prepared as part of the detailed design stage of the project. As part of this traffic management plan the traffic movements (light and heavy) associated with the construction activities will be detailed.

The transport routes for construction activities are shown below.



Figure 5-1 – Transport routes for construction activities

5.1.5 Construction Parking Impacts

Construction of the parking structure could see demands for up to 32 vehicles travelling to the site each day during the peak concrete pour activities and 13 or less cars for the balance of the works, which would need to seek parking on the local roads throughout the locality. During construction, the existing Council car park will be closed to the public and vehicle access will be provided to the adjoining car rental premises. Parking for these vehicles will need to be accommodated on the local roads for the duration of the works, which would see increased demands for parking on Edgbaston Road and Hampden Street.

To minimise the cumulative impacts on local residents and businesses, construction workers shall be encouraged and supported to use public transport to access the site, which is supported by convenient access to Beverly Hills Station from the site. Those staff who choose to drive will be directed to park on the local roads to the west of Melvin Street to reduce the parking demands within the immediate locality of the local centre on King Georges Road.

5.2 Impacts to Other Users

5.2.1 Pedestrians

Pedestrian access through the existing car park will be closed for the duration of the construction works. The informal pedestrian access between the car park and the villa complex to the west of the site shall be permanently closed as part of the development.

Pedestrian access along Edgbaston Road and King Georges Road will not be affected by construction activities within the site and access to Beverly Hills Station will be retained at all times. The existing footpath along the site frontage will need to be closed during the construction of the access driveways and may also be impacted upon by landscaping works at the front of the site. During this time, pedestrian will be diverted to the opposite side of

Edgbaston Road which shall be detailed in the contractor's Traffic Control Plan. These works are not extensive and shall create minimal disruptions for pedestrians.

5.2.2 Cyclists

No existing cycling facilities are provided in the immediate locality and therefore cyclists will not be impacted upon by construction works.

5.2.3 Bus Services

No bus services operate along Edgbaston Road and therefore bus services shall not be impacted upon by the construction works. Works do not impact upon bus services along King Georges Road.

5.2.4 Short Term Set Down and Pick Up

No short term set-down or pick-up impacted upon by construction activities. The existing loading zone located on the southern side of Edgbaston Road may be impacted during the construction work to accommodate the swept path movements for construction traffic entering or exiting the site in this location. This will be conformed with swept path assessment during the development of the construction traffic management plan for the project.

5.2.5 Taxis

No taxi facilities are provided in the immediate locality of the site and therefore shall not be impacted upon by construction works.

5.2.6 Asset Holders Access

The access for Asset Holders will be maintained for the duration of the construction work. Any access for maintenance of easements on site or on the rail network via this corridor will need to allow for consultation with the construction manager for the car park to co-ordinate the works as required.

5.2.7 Council parking on subject site

The project shall remove 105 existing timed parking spaces within the Council car park. This will require the existing users to park elsewhere on the local road network. Table 2-2 above indicates that typically the car park is 56% utilised (59 vehicles) which would result in 59 vehicles potentially seeking to park on the local road network. Due to the current reduction in commuter demands and the impact this could have on parking in the locality of the site the impact of the loss of the existing Council parking cannot be assessed. The impact of this loss of the Council parking could be monitored and if required times parking / resident parking could be installed on the local roads to reduce this impact upon the community in the immediate locality of the subject site.

6 Summary

6.1 Summary

The following conclusions are drawn from the investigations into the proposed commuter and Council car park located off Edgbaston Road, Beverly Hills.

The proposed development is for the construction of a new multi storey parking structure, with concept plans showing 200 new commuter parking spaces replacing the existing parking facility. This carpark is intended to support the existing commuter parking demands for Beverly Hills Station and future growth in the surrounding area. All vehicle access from the carpark shall be via Edgbaston Road only.

Pedestrian access will be maintained between the new car park and Beverly Hills Station, with the existing stair connection to King Georges Road to be upgraded to comply with current standards.

The new commuter carpark will result in a redistribution of traffic and parking in the local area, with the new facility expected to appeal to those who travel from the west and currently rely on commuter parking on Morgan Street / Tooronga Terrace or uncontrolled parking on the surrounding local streets. This may result in an increased number of vehicles accessing Edgbaston Road, however these trips would be dispersed over several potential routes which would reduce the impact of the proposal on any one street. Given the current demands on Edgbaston Road and the relatively low volume of traffic associated with the new commuter carpark, it is concluded that the new commuter car park will have an acceptable impact upon the surrounding road network.

This is further supported by traffic modelling completed as part of the Beverly Hills Station Commuter Car Park Traffic Study prepared by TEF Consulting (October 2018), which assessed the impacts of the proposed commuter carpark on King Georges Road and found that the carpark can be supported on traffic grounds.

The car park and the site access shall be designed in accordance with *Australian Standard AS2890 (Parking Facilities)* to allow for safe entry and exit movements. Several recommendations have been provided regarding potential improvements on Edgbaston Road to facilitate safe entry and egress from the new parking facility. Sight lines at the new entry driveway are consistent with Australian Standards.

The impacts of construction traffic associated with the new commuter carpark are low and over a short timeframe and well within the capacity of the local road network. The demands for parking associated with construction workers shall be adequately managed to minimise the disruptions for residents and nearby businesses within the local centre on King Georges Road.

The key findings for the project are:

- The proposed car park is located approximately 60 metres from Beverly Hills Station with direct pedestrian access.
- The carpark will provide 200 commuter car parking spaces to support the existing commuter parking demands associated with Beverly Hills Station.
- Four accessible parking spaces shall be provided in the commuter car park off Tooronga Terrace being the amalgamation of six existing spaces.
- Informal pedestrian access between the car park and the adjacent villa complex shall be removed as part of the development.
- The access to the car park is provided off Edgbaston Road in a similar manner to the existing car park.
- Sight distances at the upgraded access driveway are consistent with the requirements of *Australian Standard AS2890 (Parking Facilities)*.
- The new parking facility will see a redistribution of trips within the local road network, with a number of routes available for drivers to connect with Edgbaston Road (refer to Section 4.2). With trips dispersed

across several roads, the impact of any additional traffic associated with the site will be minimal and will have an acceptable impact.

The following mitigation options are put forward.

- Given the proximity of the site entry to King Georges Road, and the potential for queuing across the site frontage, a 'Keep Clear' line markings shall be required across the access driveway to ensure that access for a right turning vehicle entering the site is not blocked by queues on Edgbaston Road. This will ensure that delays for vehicles turning right into the site are minimised and therefore reduces the potential for queues at the site entry to impact upon westbound traffic on Edgbaston Road.
- Consideration should be given to removing the existing parking controls and loading zone on Edgbaston Road (between the site access and King Georges Road) to ensure that westbound traffic can pass around an occasional vehicle propped on Edgbaston Road whilst waiting to turn into the site, thus preventing queues from forming which could impact traffic entering Edgbaston Road from King Georges Road.
- The impacts of the construction staff parking shall be mitigated as part of the detailed design and controls / recommendations included in the Construction Traffic Management Plan.
- Suitable pedestrian connections shall be provided within the site to enable access to the pedestrian stairs at King Georges Road with no requirement for commuters to cross King Georges Road or local roads to access Beverly Hills Station.
- A Construction Traffic Management Plan shall be developed and implemented to reduce the impact of the trucks associated with the construction activities.
- Construction staff shall be encouraged and supported to use public transport to access the site.
- During construction, the major impact would be the demands for on-street parking associated with construction workers who drive to the site and the closure of the existing Council carpark. The impacts of this parking shall be mitigated as part of the detailed design and controls / recommendations included in the Construction Traffic Management Plan.
- Traffic movements associated with the construction activities would have a minimal impact upon the overall operation of the road network, and the key routes are all designed to accommodate heavy vehicles.

- Truck access to the site will be available via the maintenance corridor at the northern end of Melvin Street. This access will be used by empty trucks only and shall have a minor impact upon the operation of this road.
- Work outside of the normal construction hours of 7am-6pm Monday to Friday and 8am-1pm shall hours on site shall only occur under the following requirements:
- The delivery of fill or material may occur outside these hours if required by the Police or other authorities;
Council provides permission for working out of hours;
 - It is required in an emergency to avoid loss of life, damage to property and / or to prevent environmental harm;
 - The work is approved under a Construction Noise and Vibration Management Plan;
 - Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.
- The swept path requirements for heavy vehicles accessing the site may require the existing loading zone on the southern side of Edgbaston Road to be removed during construction. This will be confirmed as part of the Construction Traffic Management Plan.
- The car park shall be designed in accordance with AS2890 including the sight line requirements at the site access on Edgbaston Road.
- Monitor the impact of the removal of the Council parking on the subject site and if the impacts are not acceptable then timed parking with resident parking could be provided in the locality of the subject site.

It is therefore concluded from the investigations that the traffic and parking arrangements for the proposed car park are satisfactory.

Appendix A – Traffic Data (TEF Consulting)

JOB No.
DATE
DAY
LOCATION
WEATHER
OBSERVER

LV - Light
Vehicles
HV - Heavy
Vehicles

FROM	TO	1		2		3		4		5		6		7		8		9		10		11		12		13		TOTAL
		LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	
6:30	- 6:45	0	0	34	3	2	0	3	0	0	0	3	0	0	0	0	0	5	0	2	0	0	0	0	0	0	0	52
6:45	- 7:00	5	0	42	0	1	0	0	0	0	0	1	0	1	0	1	0	19	0	4	0	0	0	0	0	0	0	75
7:00	- 7:15	5	0	31	1	1	0	2	0	0	0	1	0	0	0	0	0	13	1	1	0	0	0	0	0	0	0	56
7:15	- 7:30	7	0	57	0	3	0	1	0	0	0	1	0	1	0	2	0	25	2	1	0	0	0	0	0	0	0	100
7:30	- 7:45	1	0	45	0	3	0	1	0	0	0	2	0	0	0	1	0	13	0	0	0	0	0	0	0	0	0	66
7:45	- 8:00	8	0	55	1	6	0	2	0	0	0	2	0	0	1	1	18	1	3	0	0	0	0	0	0	0	0	100
8:00	- 8:15	10	0	49	0	8	0	5	0	0	0	0	1	5	0	1	23	1	4	0	0	0	0	0	0	0	0	107
8:15	- 8:30	6	0	42	1	5	0	2	0	1	0	1	0	5	0	1	13	1	0	0	0	0	0	0	0	0	0	78
8:30	- 8:45	9	0	38	0	3	1	0	0	0	0	1	0	1	0	2	30	2	1	0	0	0	0	0	0	0	0	88
8:45	- 9:00	7	0	33	0	9	0	3	0	0	0	1	0	4	0	1	30	1	1	0	0	0	0	0	0	0	0	90
9:00	- 9:15	4	0	29	0	7	0	6	1	1	0	4	0	5	0	2	30	1	1	0	0	0	0	0	0	0	0	91
9:15	- 9:30	1	0	32	1	2	0	3	0	1	0	0	0	1	0	1	30	1	4	0	0	0	0	0	0	0	0	77
9:30	- 9:45	5	1	24	1	2	0	3	0	0	0	0	0	1	0	1	24	0	2	1	0	0	0	0	0	0	0	65
9:45	- 10:00	1	0	3	0	0	0	1	0	0	0	1	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	14
TOTAL		70	1	514	8	52	2	31	1	4	0	17	1	27	0	15	1	279	11	24	1	0	0	0	0	0	0	1059

FROM	TO	1		2		3		4		5		6		7		8		9		10		11		12		13		TOTAL
		LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	
16:00	- 16:15	2	0	7	0	0	0	1	0	0	0	3	0	1	0	0	0	29	4	3	0	0	0	0	0	0	0	50
16:15	- 16:30	3	0	18	1	3	0	7	0	1	0	4	0	1	0	3	0	61	1	7	0	0	0	0	0	0	0	110
16:30	- 16:45	5	0	25	0	6	0	10	0	2	0	4	0	1	0	1	0	71	0	7	0	0	0	0	0	0	0	133
16:45	- 17:00	8	0	21	0	3	0	6	0	1	0	2	0	2	0	0	0	70	2	3	1	0	0	0	0	0	0	119
17:00	- 17:15	2	0	26	0	6	0	12	0	1	0	2	0	5	0	2	0	74	0	10	0	0	0	0	0	0	0	140
17:15	- 17:30	5	1	19	0	7	0	6	0	0	0	5	0	3	0	3	0	76	0	9	0	0	0	0	0	0	0	134
17:30	- 17:45	1	1	14	1	9	0	5	0	0	0	9	0	2	0	2	0	82	1	11	0	0	0	0	0	0	0	138
17:45	- 18:00	6	0	15	1	6	0	5	0	1	0	0	0	1	0	2	0	57	1	23	0	0	0	0	0	0	0	118
18:00	- 18:15	3	0	17	0	4	0	10	0	2	0	4	0	8	0	4	0	57	1	13	0	0	0	0	0	0	0	123
18:15	- 18:30	10	1	20	0	12	0	8	0	2	0	4	0	5	0	3	0	80	0	20	0	0	0	0	0	0	0	145
18:30	- 18:45	4	0	17	0	4	0	5	0	0	0	3	0	1	0	0	0	52	0	21	0	0	0	0	0	0	0	113
TOTAL		50	3	199	3	60	0	75	0	10	0	40	0	30	0	26	0	689	10	127	1	0	0	0	0	0	0	1323

HOURLY COUNTS

6:30	- 7:30	18	0	164	4	7	0	6	0	0	0	6	0	2	0	3	0	62	3	8	0	0	0	0	0	0	0	283
6:45	- 7:45	19	0	175	1	8	0	4	0	0	0	5	0	2	0	4	0	70	3	6	0	0	0	0	0	0	0	297
7:00	- 8:00	21	0	188	2	13	0	6	0	0	0	6	0	3	0	4	1	69	4	5	0	0	0	0	0	0	0	322
7:15	- 8:15	26	0	206	1	20	0	9	0	0	0	5	1	8	0	5	1	79	4	8	0	0	0	0	0	0	0	373
7:30	- 8:30	25	0	191	2	22	0	10	0	1	0	5	1	12	0	4	1	67	3	7	0	0	0	0	0	0	0	351
7:45	- 8:45	33	0	194	2	22	1	9	0	1	0	4	1	13	0	5	1	84	5	8	0	0	0	0	0	0	0	373
8:00	- 9:00	32	0	162	1	25	1	10	0	1	0	3	1	15	0	5	0	96	5	6	0	0	0	0	0	0	0	363
8:15	- 9:15	26	0	142	1	24	1	11	1	2	0	7	0	15	0	6	0	103	5	3	0	0	0	0	0	0	0	347
8:30	- 9:30	21	0	132	1	21	1	12	1	2	0	6	0	11	0	6	0	120	5	7	0	0	0	0	0	0	0	346
8:45	- 9:45	17	1	118	2	20	0	15	1	2	0	5	0	11	0	5	0	114	3	8	1	0	0	0	0	0	0	323
9:00	- 10:00	11	1	88	2	11	1	12	1	3	0	4	0	8	0	5	0	90	2	7	1	0	0	0	0	0	0	247
9:15	- #REF!	7	1	59	2	4	1	6	0	2	0	0	0	3	0	3	0	65	1	6	1	0	0	0	0	0	0	156
9:30	- #REF!	5	1	27	1	2	1	3	0	1	0	0	0	2	0	2	0	30	0	2	1	0	0	0	0	0	0	79

16:00	- 17:00	19	0	71	1	12	0	24	0	4	0	13	0	5	0	4	0	231	7	20	1	0	0	0	0	0	0	412
16:15	- 17:15	19	0	90	1	18	0	35	0	5	0	12	0	9	0	6	0	276	3	27	1	0	0	0	0	0	0	502
16:30	- 17:30	21	1	91	0	22	0	34	0	4	0	13	0	11	0	6	0	291	2	29	1	0	0	0	0	0	0	526
16:45	- 17:45	16	2	80	1	25	0	29	0	2	0	18	0	12	0	7	0	302	3	33	1	0	0	0	0	0	0	531
17:00	- 18:00	14	2	74	2	28	0	28	0	2	0	16	0	11	0	9	0	289	2	53	0	0	0	0	0	0	0	530
17:15	- 18:45	29	3	102	2	42	0	39	0	5	0	25	0	20	0	20	0	384	3	97	0	0	0	0	0	0	0	771
17:30	- #REF!	24	2	83	2	35	0	33	0	5	0	20	0	17	0	17	0	308	3	88	0	0	0	0	0	0	0	637
17:45	- #REF!	23	1	69	1	26	0	28	0	5	0	11	0	15	0	15	0	226	2	77	0	0	0	0	0	0	0	499
18:30	- #REF!	4	0	17	0	4	0	5	0	0	0	3	0	1	0	6	0	52	0	21	0	0	0	0	0	0	0	113

NSW Government
Transport for NSW
Centre for Road Safety

Crashid dataset 8326 - Beverly Hills Crash Data - 1 Jan 2013 to 31 Dec 2017

Note: Crash self reporting, including self reported injuries began Oct 2014. Trends from 2014 are expected to vary from previous yrs. More unknowns are expected in self reported data. Reporting yrs 1996-2004 & 2018 Q2 onwards contain uncategorised inj crashes.

Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

Detailed Crash Report

NOTES: 8326 - Beverly Hills Crash Data - 1 Jan 2013 to 31 Dec 2017

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncat'd Inj.	Factors
Sydney Region																							
Georges River LGA																							
Beverly Hills																							
Dennis PI																							
833505	P	10/04/2013	Wed	07:57		at EDGBASTON RD	TJN	STR	Fine	Dry	50	2	CAR	M32	E in EDGBASTON RD	5	Proceeding in lane	MC	0	0	1	0	0
E51154218							RUM	30	Rear end				CAR	F48	E in EDGBASTON RD	0	Stationary						
Edgbaston Rd																							
843762	P	15/06/2013	Sat	20:00		at HAMPDEN ST	TJN	STR	Fine	Dry	50	2	CAR	F21	N in HAMPDEN ST	15	Turning right	NC	0	0	0	0	0
E51579923							RUM	13	Right near				CAR	M19	W in EDGBASTON RD	50	Proceeding in lane						
1054824	S	18/10/2014	Thu	07:40		at HAMPDEN ST	TJN	STR	Fine	Dry	50	2	CAR	F U	N in EDGBASTON RD	Unk	Pull out opposite	NC	0	0	0	0	0
E56724263							RUM	53	Overtake turning				WAG	F52	N in EDGBASTON RD	Unk	Turning right						
1054873	S	11/11/2014	Tue	17:30	50 m	W KING GEORGES RD	2WY	STR	Fine	Dry	50	2	WAG	M31	W in EDGBASTON RD	Unk	Proceeding in lane	OC	0	0	0	1	0
E55234110							RUM	30	Rear end				CAR	F26	W in EDGBASTON RD	0	Stationary						
1021396	P	12/04/2014	Sat	23:35		at MELVIN ST	XJN	STR	Raining	Wet	50	2	4WD	F36	N in MELVIN ST	10	Proceeding in lane	SC	0	1	1	0	0
E54531050							RUM	10	Cross traffic				CAR	M17	W in EDGBASTON RD	50	Proceeding in lane						
1039453	P	10/08/2014	Sun	12:45		at MELVIN ST	XJN	STR	Fine	Dry	50	2	WAG	F34	W in EDGBASTON RD	10	Veering right	OC	0	0	0	1	0
E221044495							RUM	34	Lane change right				CAR	M29	W in EDGBASTON RD	40	Proceeding in lane						
1100527	P	02/04/2016	Sat	18:00		at MELVIN ST	XJN	STR	Fine	Dry	50	2	CAR	M87	S in MELVIN ST	10	Turning left	MC	0	0	1	0	0
E117373701							RUM	0	Ped nearside				PED	F18	S in MELVIN ST		Step off/onto kerb						
1051329	P	24/10/2014	Fri	10:15		at NUMBER 2C HN	2WY	STR	Overcast	Dry	50	2	TRK	M31	W in EDGBASTON RD	4	Reversing in lane	SC	0	1	1	0	0
E56938441							RUM	0	Ped nearside				PED	F87	S in EDGBASTON RD		Walk across carriageway						
1081960	P	14/08/2015	Fri	00:30		at NUMBER 9 HN	2WY	STR	Fine	Dry	50	2	CAR	M31	S in EDGBASTON RD	50	Proceeding in lane	NC	0	0	0	0	0
E58377535							RUM	71	Off rd left => obj				CAR		S in EDGBASTON RD	0	Parked						
833168	P	24/03/2013	Sun	10:55	5 m	E PENSHURST ST	RDB	STR	Fine	Dry	50	2	CAR	F23	W in EDGBASTON RD	Unk	Proceeding in lane	OC	0	0	0	1	0
E51366077							RUM	30	Rear end				CAR	M52	W in EDGBASTON RD	0	Stationary						
845838	P	27/06/2013	Thu	22:20		at UNNAMED LANE	TJN	STR	Fine	Dry	50	2	CAR	M23	E in EDGBASTON RD	20	Turning right	MC	0	0	1	0	0
E51871534							RUM	21	Right through				M/C	M32	W in EDGBASTON RD	40	Proceeding in lane						
Hampden Lane																							
1010519	P	10/12/2013	Tue	07:30		at UNNAMED COUNCIL LANE	XJN	STR	Fine	Dry	50	2	CAR	F23	W in HAMPDEN LANE	Unk	Turning left	NC	0	0	0	0	0
E53965767							RUM	16	Left near				CAR	F35	S in UNNAMED COUNCIL LANE	20	Proceeding in lane						
Hampden St																							
1016263	P	19/03/2014	Wed	06:45	50 m	S EDGBASTON RD	2WY	STR	Fine	Dry	50	2	CAR	F44	N in HAMPDEN ST	5	Pulling out	NC	0	0	0	0	0
E54716229							RUM	42	Leaving parking				TRK	M41	N in HAMPDEN ST	40	Proceeding in lane						

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Detailed Crash Report



Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
King Georges Rd																								
829285 P		06/03/2013	Wed	16:41		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	CAR F27	F27	S in KING GEORGES RD	10	Turning right	NC	0	0	0	0	0	
E50543644							RUM	21	Right through				CAR M74	M74	N in KING GEORGES RD	60	Proceeding in lane							
1003054 P		07/10/2013	Mon	22:00		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	LOR M59	M59	E in EDGBASTON RD	10	Turning left	NC	0	0	0	0	0	0
E55059884							RUM	37	Left turn sideswipe				CAR F28	F28	E in EDGBASTON RD	0	Stationary							
857350 P		07/11/2013	Thu	00:45		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	CAR M31	M31	S in KING GEORGES RD	Unk	Turning right	NC	0	0	0	0	0	0
E52502670							RUM	21	Right through				CAR F41	F41	N in KING GEORGES RD	50	Proceeding in lane							
1031721 P		23/05/2014	Fri	18:20		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	WAG M18	M18	S in KING GEORGES RD	20	Turning right	MC	0	0	1	0	0	0
E54588932							RUM	21	Right through				TRK M22	M22	N in KING GEORGES RD	40	Proceeding in lane							
1068350 P		15/04/2015	Wed	18:30		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	CAR F47	F47	S in KING GEORGES RD	10	Turning right	SC	0	1	0	0	0	0
E59810085							RUM	21	Right through				CAR F21	F21	N in KING GEORGES RD	60	Proceeding in lane							
1072727 S		05/07/2015	Sun	19:00		at EDGBASTON RD	TJN	STR	Fine	Dry	60	3	CAR M U	M U	W in EDGBASTON RD	Unk	Proceeding in lane	MC	0	0	1	0	0	0
E59248853							RUM	30	Rear end				WAG F32	F32	W in EDGBASTON RD	0	Stationary							
													CAR M U	M U	W in EDGBASTON RD	0	Stationary							
1137068 P		17/04/2017	Mon	11:08		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	CAR M51	M51	S in KING GEORGES RD	15	Turning right	OC	0	0	0	0	1	0
E125043002							RUM	21	Right through				CAR M68	M68	N in KING GEORGES RD	40	Proceeding in lane							
1149677 S		23/09/2017	Sat	12:50		at EDGBASTON RD	TJN	STR	Fine	Dry	60	2	CAR M22	M22	N in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	0
E67284578							RUM	30	Rear end				4WD F30	F30	N in KING GEORGES RD	0	Stationary							
848407 P		27/07/2013	Sat	19:40	10 m	N EDGBASTON RD	TJN	STR	Fine	Dry	60	2	M/C M69	M69	N in KING GEORGES RD	45	Proceeding in lane	SC	0	1	0	0	0	0
E52470749							RUM	30	Rear end				4WD F38	F38	N in KING GEORGES RD	45	Proceeding in lane							
1094796 S		23/02/2016	Tue	15:15	10 m	N EDGBASTON RD	TJN	STR	Fine	Dry	40	2	CAR M21	M21	N in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	0
E60690919							RUM	30	Rear end				CAR F70	F70	N in KING GEORGES RD	Unk	Proceeding in lane							
1080803 P		14/08/2015	Fri	18:45	80 m	S EDGBASTON RD	DIV	STR	Fine	Dry	60	2	CAR F22	F22	N in KING GEORGES RD	60	Proceeding in lane	MC	0	0	1	0	0	0
E58909538							RUM	30	Rear end				4WD M55	M55	N in KING GEORGES RD	40	Proceeding in lane							
1009092 P		19/11/2013	Tue	20:15	115 m	S EDGBASTON RD	DIV	STR	Fine	Dry	60	2	M/C M21	M21	N in KING GEORGES RD	10	Proceeding in lane	MC	0	0	1	0	0	0
E53185526							RUM	2	Ped far side				PED F39	F39	W in KING GEORGES RD	Walk across carriageway								
822455 P		06/01/2013	Sun	16:25	125 m	S EDGBASTON RD	DIV	STR	Fine	Dry	60	2	CAR M75	M75	N in KING GEORGES RD	40	Proceeding in lane	SC	0	1	0	0	0	0
E50079405							RUM	30	Rear end				WAG M20	M20	N in KING GEORGES RD	0	Stationary							
1054384 S		21/10/2014	Tue	09:05		at FREDERICK AVE	TJN	STR	Fine	Dry	40	2	SEM M39	M39	S in KING GEORGES RD	Unk	Other forward	NC	0	0	0	0	0	0
E55861805							RUM	39	Other same direction				CAR F39	F39	S in KING GEORGES RD	Unk	Proceeding in lane							
832816 P		22/02/2013	Fri	13:05	50 m	N FREDERICK AVE	DIV	STR	Fine	Dry	60	2	TRK M48	M48	S in KING GEORGES RD	40	Veering right	NC	0	0	0	0	0	0
E50137009							RUM	34	Lane change right				4WD F33	F33	S in KING GEORGES RD	30	Proceeding in lane							
1128591 S		14/09/2016	Wed	12:30	65 m	S FREDERICK AVE	DIV	STR	Fine	Dry	60	2	CAR F U	F U	S in KING GEORGES RD	Unk	Proceeding in lane	OC	0	0	0	0	1	0
E64001975							RUM	30	Rear end				CAR M52	M52	S in KING GEORGES RD	0	Stationary							

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Detailed Crash Report



Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	SF
1021499 P	17/04/2014	Thu	11:40			at MORGAN ST	TJN	STR	Fine	Dry	60	2	CAR F45	N in KING GEORGES RD	10	Turning right	NC	0	0	0	0	0		
E230921194							RUM	21	Right through				4WD M40	S in KING GEORGES RD	40	Proceeding in lane								
1026250 P	20/05/2014	Tue	11:05			at MORGAN ST	TJN	STR	Fine	Dry	60	2	CAR F69	N in KING GEORGES RD	20	Turning right	NC	0	0	0	0	0		
E54591623							RUM	21	Right through				CAR M31	S in KING GEORGES RD	55	Proceeding in lane								
1058669 S	29/01/2015	Thu	13:25			at MORGAN ST	TJN	STR	Fine	Dry	60	2	TRK M37	W in KING GEORGES RD	Unk	Turning right	OC	0	0	0	1	0		
E59733981							RUM	36	Right turn sideswipe				CAR F68	W in KING GEORGES RD	Unk	Turning right								
1067891 P	24/02/2015	Tue	08:20			at MORGAN ST	TJN	STR	Fine	Dry	40	2	4WD F U	W in MORGAN ST	Unk	Turning right	MC	0	0	1	1	0		
E57437164							RUM	13	Right near				CAR F28	S in KING GEORGES RD	Unk	Proceeding in lane								
1063556 S	21/03/2015	Sat	09:45			at MORGAN ST	TJN	STR	Raining	Wet	60	2	LOR M59	S in KING GEORGES RD	Unk	Proceeding in lane	OC	0	0	0	1	0		
E57467547							RUM	30	Rear end				CAR M27	S in KING GEORGES RD	0	Stationary								
1068703 S	27/05/2015	Wed	20:00			at MORGAN ST	TJN	STR	Fine	Dry	60	2	WAG F29	N in KING GEORGES RD	Unk	Turning right	NC	0	0	0	0	0		
E58232119							RUM	21	Right through				CAR M21	S in KING GEORGES RD	Unk	Proceeding in lane								
1109858 S	31/05/2016	Tue	18:20			at MORGAN ST	TJN	STR	Raining	Wet	60	2	CAR F36	W in MORGAN ST	Unk	Proceeding in lane	OC	0	0	0	1	0		
E62684365							RUM	30	Rear end				CAR M28	W in MORGAN ST	0	Stationary								
1105853 S	02/06/2016	Thu	12:40			at MORGAN ST	TJN	STR	Fine	Dry	60	3	TRK F67	N in KING GEORGES RD	Unk	Proceeding in lane	OC	0	0	0	1	0		
E64092983							RUM	30	Rear end				CAR M36	N in KING GEORGES RD	0	Stationary								
1113787 P	01/08/2016	Mon	17:35			at MORGAN ST	TJN	STR	Raining	Wet	60	2	CAR M U	N in KING GEORGES RD	20	Proceeding in lane	OC	0	0	0	1	0		
E62453571							RUM	31	Left rear				CAR F46	N in KING GEORGES RD	20	Turning left								
1131421 S	24/03/2017	Fri	15:30			at MORGAN ST	TJN	STR	Fine	Dry	40	2	TRK M23	N in KING GEORGES RD	Unk	Forward from drive	NC	0	0	0	0	0		
E64063948							RUM	39	Other same direction				CAR F63	N in KING GEORGES RD	Unk	Proceeding in lane								
1143276 P	09/07/2017	Sun	04:00			at MORGAN ST	TJN	STR	Fine	Dry	60	1	WAG M39	W in MORGAN ST	40	Turning right	NC	0	0	0	0	0	S	
E64798717							RUM	83	Off r/t bnd=>obj				Signal pole											
827185 P	20/01/2013	Sun	20:50		5 m	N MORGAN ST	TJN	STR	Raining	Wet	60	2	CAR M26	S in KING GEORGES RD	50	Proceeding in lane	OC	0	0	0	1	0		
E210499094							RUM	32	Right rear				CAR M55	S in KING GEORGES RD	0	Wait turn right								
1016863 P	18/01/2014	Sat	17:00		10 m	N MORGAN ST	TJN	STR	Fine	Dry	60	3	CAR F29	S in KING GEORGES RD	30	Proceeding in lane	MC	0	0	2	0	0		
E54563453							RUM	30	Rear end				CAR F52	S in KING GEORGES RD	20	Proceeding in lane								
1025403 P	27/05/2014	Tue	13:00		10 m	N MORGAN ST	TJN	STR	Fine	Dry	60	2	TRK M35	S in KING GEORGES RD	15	Proceeding in lane								
E54321615							RUM	30	Rear end				CAR F21	S in KING GEORGES RD	45	Proceeding in lane	NC	0	0	0	0	0		
1035689 P	20/07/2014	Sun	17:45			at NORFOLK AVE	TJN	STR	Fine	Dry	60	3	4WD M26	S in KING GEORGES RD	30	Proceeding in lane	NC	0	0	0	0	0		
E55027844							RUM	30	Rear end				CAR F29	S in KING GEORGES RD	0	Stationary								
													WAG M39	S in KING GEORGES RD	30	Proceeding in lane								

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1060601 P	E56803544	10/02/2015	Tue	20:35		at NORFOLK AVE	TJN	STR	Fine	Dry	60	3	SEM CAR M26	M26	S in KING GEORGES RD	50	Proceeding in lane	MC	0	0	1	0	0	
							RUM	30	Rear end				TRK M20	M20	S in KING GEORGES RD	50	Proceeding in lane							
													M23	M23	S in KING GEORGES RD	0	Stationary							
1072039 P	E57785905	21/05/2015	Thu	12:50		at NORFOLK AVE	TJN	STR	Fine	Dry	60	2	LOR 4WD	M U	S in KING GEORGES RD	40	Proceeding in lane	SC	0	1	0	0	0	
							RUM	30	Rear end				M U	M U	S in KING GEORGES RD	0	Stationary							
848776 P	E51410309	09/07/2013	Tue	20:30	30 m	N NORFOLK AVE	DIV	STR	Raining	Wet	60	2	CAR M32	M32	N in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	
							RUM	30	Rear end				SEM M38	M38	N in KING GEORGES RD	0	Stationary							
1044943 P	E58651288	11/10/2014	Sat	15:27	50 m	N NORFOLK AVE	DIV	STR	Fine	Dry	60	3	WAG M41	M41	S in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	
							RUM	30	Rear end				CAR M74	M74	S in KING GEORGES RD	0	Stationary							
													4WD M74	M74	S in KING GEORGES RD	0	Stationary							
1157696 P	E65524903	30/09/2017	Sat	23:15	20 m	S NORFOLK AVE	DIV	STR	Fine	Dry	60	3	CAR M24	M24	S in KING GEORGES RD	60	Veering right	MC	0	0	1	2	0	
							RUM	34	Lane change right				CAR F23	F23	S in KING GEORGES RD	5	Proceeding in lane							
													CAR		S in KING GEORGES RD	0	Parked							
1072072 S	E233956395	24/06/2015	Wed	15:44	25 m	S NORFOLK AVE	DIV	STR	Raining	Wet	40	2	WAG M76	M76	S in KING GEORGES RD	Unk	Veering right	OC	0	0	0	1	0	
							RUM	34	Lane change right				CAR F32	F32	S in KING GEORGES RD	Unk	Proceeding in lane							
1006168 P	E55383583	25/10/2013	Fri	23:00	50 m	S NORFOLK AVE	DIV	STR	Fine	Dry	60	3	CAR M31	M31	S in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	F
							RUM	71	Off rd left => obj				CAR		S in KING GEORGES RD	0	Parked							
													TRK		S in KING GEORGES RD	0	Parked							
1125815 S	E63059937	18/01/2017	Wed	14:30		at NUMBER 507 HN	DIV	STR	Fine	Dry	60	2	CAR M27	M27	N in KING GEORGES RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
							RUM	49	Other manoeuvring				CAR M32	M32	N in KING GEORGES RD	Unk	Other forward							
855132 P	E52328655	29/03/2013	Fri	22:28		at STONEY CREEK RD	XJN	STR	Fine	Dry	60	1	OMV M22	M22	N in KING GEORGES RD	80	Turning left	MC	0	0	2	0	0	S
							RUM	85	Off r/lft bnd=>obj				Utility pole											
1028546 P	E53869315	03/04/2014	Thu	17:40		at STONEY CREEK RD	TJN	STR	Fine	Dry	60	2	WAG F28	F28	W in KING GEORGES RD	40	Turning right	NC	0	0	0	0	0	
							RUM	11	Right far				4WD F26	F26	S in STONEY CREEK RD	45	Proceeding in lane							
1029631 P	E54595527	26/05/2014	Mon	10:30		at STONEY CREEK RD	XJN	STR	Fine	Dry	60	3	4WD PED	F29	W in STONEY CREEK RD	20	Turning left	SC	0	2	0	0	0	
							RUM	0	Ped nearside				PED F45	F45	W in STONEY CREEK RD		Walk across carriageway							
													PED F20	F20	W in STONEY CREEK RD		Walk across carriageway							
1041443 P	E58170081	16/08/2014	Sat	06:17		at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	WAG F39	F39	N in KING GEORGES RD	10	Turning right	NC	0	0	0	0	0	
							RUM	21	Right through				CAR M45	M45	S in KING GEORGES RD	60	Proceeding in lane							
1054274 S	E56218412	14/11/2014	Fri	15:10		at STONEY CREEK RD	XJN	CRV	Fine	Dry	40	2	4WD U U	U U	N in STONEY CREEK RD	Unk	Other forward	NC	0	0	0	0	0	
							RUM	99	Unknown				4WD M49	M49	N in KING GEORGES RD	Unk	Other forward							
1055986 P	E55814509	02/12/2014	Tue	05:20		at STONEY CREEK RD	XJN	STR	Other	Wet	60	1	M/C M42	M42	N in KING GEORGES RD	40	Proceeding in lane	MC	0	0	1	0	0	F
							RUM	74	On road-out of cont.															
1076519 S	E59367274	13/07/2015	Mon	07:30		at STONEY CREEK RD	XJN	STR	Raining	Wet	60	2	CAR F47	F47	E in STONEY CREEK RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
							RUM	30	Rear end				CAR F24	F24	E in STONEY CREEK RD	Unk	Proceeding in lane							

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1075414 S	30/07/2015	Thu	18:30			at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	4WD F60	N in KING GEORGES RD	Unk	Proceeding in lane	MC	0	0	1	0	0	
E114039102							RUM	30	Rear end				CAR M32	N in KING GEORGES RD	0	Stationary							
1102103 P	13/05/2016	Fri	20:30			at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	CAR M29	N in KING GEORGES RD	30	Proceeding in lane	MC	0	0	1	0	0	
E61062712							RUM	30	Rear end				4WD M64	N in KING GEORGES RD	0	Stationary							
1135401 P	10/02/2017	Fri	12:50			at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	LOR M43	N in KING GEORGES RD	30	Proceeding in lane	OC	0	0	0	1	0	
E239491696							RUM	30	Rear end				WAG M71	N in KING GEORGES RD	30	Proceeding in lane							
1149266 S	16/09/2017	Sat	11:45			at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	SEM M79	W in STONEY CREEK RD	Unk	Turning right	NC	0	0	0	0	0	
E67930784							RUM	21	Right through				MIC M31	E in STONEY CREEK RD	Unk	Proceeding in lane							
1154963 P	25/09/2017	Mon	18:40			at STONEY CREEK RD	XJN	STR	Other	Unk	60	2	TRK M30	S in KING GEORGES RD	60	Veering left	MC	0	0	1	0	0	
E65365923							RUM	35	Lane change left				CAR F26	S in KING GEORGES RD	60	Proceeding in lane							
1166813 S	13/12/2017	Wed	05:00			at STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	4WD M36	N in KING GEORGES RD	Unk	Other forward	OC	0	0	0	1	0	
E66866149							RUM	39	Other same direction				4WD M32	N in KING GEORGES RD	Unk	Other forward							
1020424 P	08/04/2014	Tue	20:10		5 m	N STONEY CREEK RD	XJN	STR	Fine	Dry	60	2	CAR M47	S in KING GEORGES RD	60	Proceeding in lane	NC	0	0	0	0	0	
E54461954							RUM	30	Rear end				4WD F61	S in KING GEORGES RD	0	Stationary							
1068678 S	26/05/2015	Tue	15:45		5 m	N STONEY CREEK RD	XJN	STR	Fine	Dry	40	2	TRK M39	S in KING GEORGES RD	Unk	Proceeding in lane	NC	0	0	0	0	0	
E58550279							RUM	30	Rear end				CAR F37	S in KING GEORGES RD	0	Stationary							
1011301 P	10/01/2014	Fri	18:25		10 m	N STONEY CREEK RD	XJN	STR	Fine	Dry	60	11	CAR M24	N in KING GEORGES RD	Unk	Proceeding in lane	MC	0	0	1	1	0	
E53635134							RUM	30	Rear end				CAR M25	N in KING GEORGES RD	Unk	Proceeding in lane							
													4WD F33	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR M39	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR M23	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR F23	N in KING GEORGES RD	Unk	Proceeding in lane							
													4WD F49	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR F22	N in KING GEORGES RD	Unk	Proceeding in lane							
													UTE M45	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR M31	N in KING GEORGES RD	Unk	Proceeding in lane							
													CAR U U	N in KING GEORGES RD	Unk	Proceeding in lane							
841309 P	08/06/2013	Sat	20:45		50 m	N STONEY CREEK RD	DIV	STR	Fine	Dry	60	3	CAR M33	S in KING GEORGES RD	40	Proceeding in lane	NC	0	0	0	0	0	
E51445444							RUM	30	Rear end				CAR F24	S in KING GEORGES RD	40	Proceeding in lane							
													CAR M45	S in KING GEORGES RD	40	Proceeding in lane							
1056845 S	25/01/2015	Sun	21:10		50 m	N STONEY CREEK RD	DIV	STR	Fine	Dry	60	2	CAR F45	N in KING GEORGES RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
E57875108							RUM	30	Rear end				CAR F19	N in KING GEORGES RD	Unk	Proceeding in lane							
850128 P	07/09/2013	Sat	19:45		100 m	N STONEY CREEK RD	DIV	STR	Fine	Dry	60	2	CAR M29	N in KING GEORGES RD	15	Proceeding in lane	NC	0	0	0	0	0	
E180070497							RUM	30	Rear end				CAR M61	N in KING GEORGES RD	0	Stationary							

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1026021 P	04/06/2014	Wed	22:20	100 m	N	STONEY CREEK RD	DIV	STR	Overcast	Dry	60	2	CAR M67	S in KING GEORGES RD	10 Pulling out	NC	0	0	0	0	0	0	
E57260584	1085329 P	04/11/2015	Wed	09:40	100 m	N	STONEY CREEK RD	RUM 44	Parking vehicles	Dry	60	2	CAR 4WD F23	S in KING GEORGES RD	0 Parked	MC	0	0	1	1	0	0	
E216560496	1054245 S	26/10/2014	Sun	12:35	500 m	N	STONEY CREEK RD	RUM 30	Rear end	Dry	60	3	CAR F U	N in KING GEORGES RD	Unk Proceeding in lane	OC	0	0	0	1	0	0	
E56647329	829524 P	11/02/2013	Mon	07:55	100 m	N	STONY CREEK RD	RUM 30	Rear end	Dry	60	2	CAR F37	N in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	
E52334982	845777 P	22/05/2013	Wed	21:55		at TOORONGA TCE	DIV	STR	Fine	Dry	60	2	CAR M U	N in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	
E51638807	1054909 S	27/11/2014	Thu	19:00		at TOORONGA TCE	RUM 34	Lane change right	Wet	60	2	CAR F62	N in KING GEORGES RD	20 Veering right	NC	0	0	0	0	0	0	0	
E57067169	1060159 S	06/03/2015	Fri	07:25		at TOORONGA TCE	RUM 21	Right through	Dry	60	2	CAR OMV	N in KING GEORGES RD	0 Stationary	NC	0	0	0	0	0	0	0	
E56397920	1066599 S	05/05/2015	Tue	18:45		at TOORONGA TCE	RUM 33	Lane sideswipe	Dry	60	2	CAR M55	S in KING GEORGES RD	20 Proceeding in lane	NC	0	0	0	0	0	0	0	
E57769175	1068697 S	25/05/2015	Mon	14:00		at TOORONGA TCE	RUM 30	Rear end	Dry	60	2	CAR M44	S in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	0	
E58473277	1147787 P	12/08/2017	Sat	12:00		at TOORONGA TCE	RUM 33	Lane sideswipe	Dry	60	2	CAR M44	S in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	0	
E66143174	1148560 S	08/09/2017	Fri	11:00		at TOORONGA TCE	RUM 30	Rear end	Dry	60	2	CAR M44	S in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	0	
E65636072	848429 P	02/08/2013	Fri	11:50	10 m	N	TOORONGA TCE	RUM 30	Rear end	Dry	60	2	CAR F65	W in TOORONGA TCE	Unk Proceeding in lane	NC	0	0	0	0	0	0	
E52171504	1070217 P	02/05/2015	Sat	14:20	20 m	S	TOORONGA TCE	RUM 16	Left near	Dry	60	2	CAR M U	S in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	0	0	0	0	
E57885721	1070217 P	02/05/2015	Sat	14:20	20 m	S	TOORONGA TCE	RUM 30	Rear end	Dry	60	2	CAR F65	W in TOORONGA TCE	Unk Proceeding in lane	NC	0	0	0	0	0	0	
E223465794	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 71	Off rd left => obj	Dry	60	1	CAR F25	N in KING GEORGES RD	Unk Proceeding in lane	NC	0	0	1	0	0	0	0	
E54658541	1002618 P	08/11/2013	Fri	07:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1002618 P	08/11/2013	Fri	07:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	
	1010153 P	04/02/2014	Tue	22:40		at EDGBASTON RD	RUM 30	Rear end	Dry	60	2	CAR M22	S in KING GEORGES RD	Unk Proceeding in lane	MC	0	0	1	0	0	0	0	

Rep ID: DCR01 Office: Sydney User ID: mungkur

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Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed	Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
1053277 S		28/10/2014	Tue	14:00		at EDGBASTON RD	RDB	STR	Fine	Dry	50	4	CAR TRK	F29 M51	S in EDGBASTON RD N in EDGBASTON RD	Unk	Incorrect side Proceeding in lane	MC	0	0	1	0	0		
E55946352							RUM	20	Head on				TRK CAR		N in EDGBASTON RD N in EDGBASTON RD	Unk	Parked Parked								
1099744 S		27/04/2016	Wed	07:50		at EDGBASTON RD	RDB	STR	Fine	Dry	50	2	UTE	M30	E in EDGBASTON RD	Unk	Turning right	NC	0	0	0	0	0		
E60357270							RUM	23	Right/left				4WD	F42	W in EDGBASTON RD	Unk	Turning left								
1103971 P		04/05/2016	Wed	18:35		at EDGBASTON RD	RDB	STR	Fine	Dry	50	2	WAG	F63	N in PENSHURST ST	20	Proceeding in lane	SC	0	1	0	0	0		
E61673751							RUM	10	Cross traffic				M/C	M41	W in EDGBASTON RD	10	Proceeding in lane								
Stoney Creek Rd																									
846162 P		20/07/2013	Sat	13:35	10 m	E KING GEORGES RD	XJN	STR	Fine	Dry	60	3	CAR	M18	W in STONEY CREEK RD	3	Veering right	NC	0	0	0	0	0		
E101063702							RUM	34	Lane change right				LOR	M66	W in STONEY CREEK RD	5	Proceeding in lane								
													CAR	M67	W in STONEY CREEK RD	0	Stationary								
825218 P		05/02/2013	Tue	21:40	5 m	W KING GEORGES RD	XJN	CRV	Fine	Dry	60	2	CAR	F17	E in STONEY CREEK RD	50	Proceeding in lane	OC	0	0	0	1	0		
E50596821							RUM	30	Rear end				CAR	F40	E in STONEY CREEK RD	0	Stationary								
1031312 P		29/06/2014	Sun	02:15	40 m	W KING GEORGES RD	DIV	STR	Fine	Dry	60	1	CAR	F U	E in STONEY CREEK RD	60	Proceeding in lane	NC	0	0	0	0	0	F	
E107141202							RUM	71	Off rd left => obj				Signpost												
1059781 P		09/01/2015	Fri	06:45	50 m	W KING GEORGES RD	DIV	STR	Fine	Dry	60	2	CAR	M20	E in STONEY CREEK RD	20	Proceeding in lane	MC	0	0	1	0	0		
E57141662							RUM	30	Rear end				TRK	M27	E in STONEY CREEK RD	20	Proceeding in lane								
Tooronga Tce																									
827943 P		17/02/2013	Sun	19:35	5 m	E KING GEORGES RD	TJN	STR	Fine	Dry	60	2	CAR	M20	N in KING GEORGES RD	25	Turning right	NC	0	0	0	0	0		
E300390992							RUM	13	Right near				4WD	M46	W in TOORONGA TCE	0	Wait turn right								

Report Totals: Crashes: 94 Fatal Crashes(FC): 0 Serious Injury Crashes(SC): 9 Moderate Injury Crashes(MC): 23 Minor/Other Injury Crashes(OC): 20 Uncategorised Injury Crashes(UC): 0 Non-Casualty Crashes(NC): 42
 Killed(K): 0 Seriously Injured(S): 10 Moderately Injured(M): 27 Minor/Other Injured(O): 25 Uncategorised Injured(U): 0

Crashid dataset 8326 - Beverly Hills Crash Data - 1 Jan 2013 to 31 Dec 2017
 Crash self reporting, including self reported injuries began Oct 2014. Trends from 2014 are expected to vary from previous yrs. More unknowns are expected in self reported data.
 Reporting yrs 1996-2004 & 2018 Q2 onwards contain uncategorised inj crashes.