

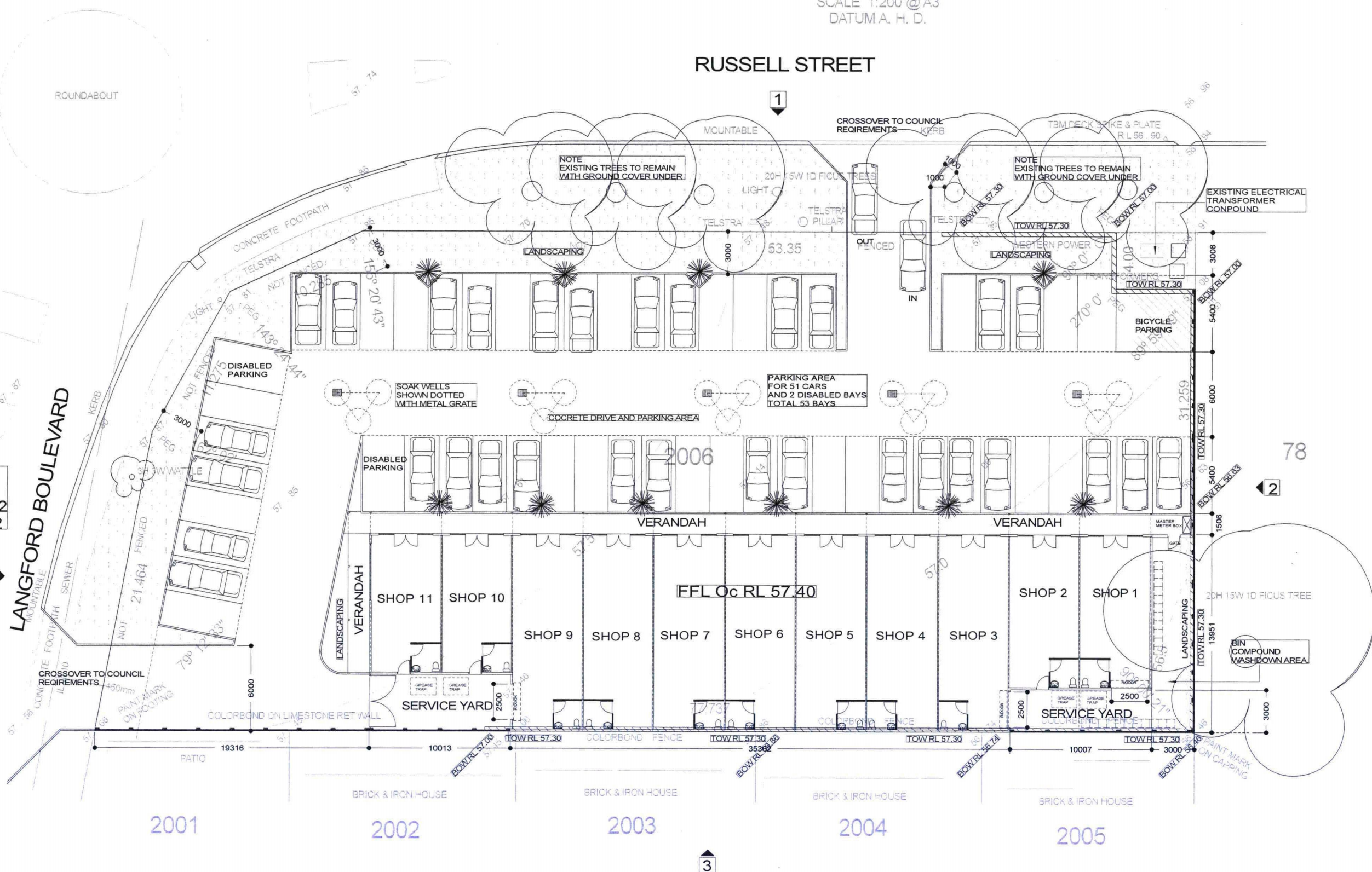
SITE SURVEY
LOT 33 ON DP 51793

C. / T. VOL. 2642 FOL. 498
MEASUREMENTS FROM FENCES
SUBJECT TO SURVEY
SCALE 1:200 @ A3
DATUM A. H. D.



BLOCK SIZE = 2548.781 M²
LANDSCAPING 8% = 203.902 M²
CALCULATED AREA = 239.641 M²

SHOP 1 = 55.745M²
SHOP 2 = 54.964M²
SHOP 3 = 70.048M²
SHOP 4 = 70.048M²
SHOP 5 = 70.048M²
SHOP 6 = 70.048M²
SHOP 7 = 70.048M²
SHOP 8 = 70.048M²
SHOP 9 = 70.048M²
SHOP 10 = 49.597M²
SHOP 11 = 50.700M²
TOTAL = 701.342M²



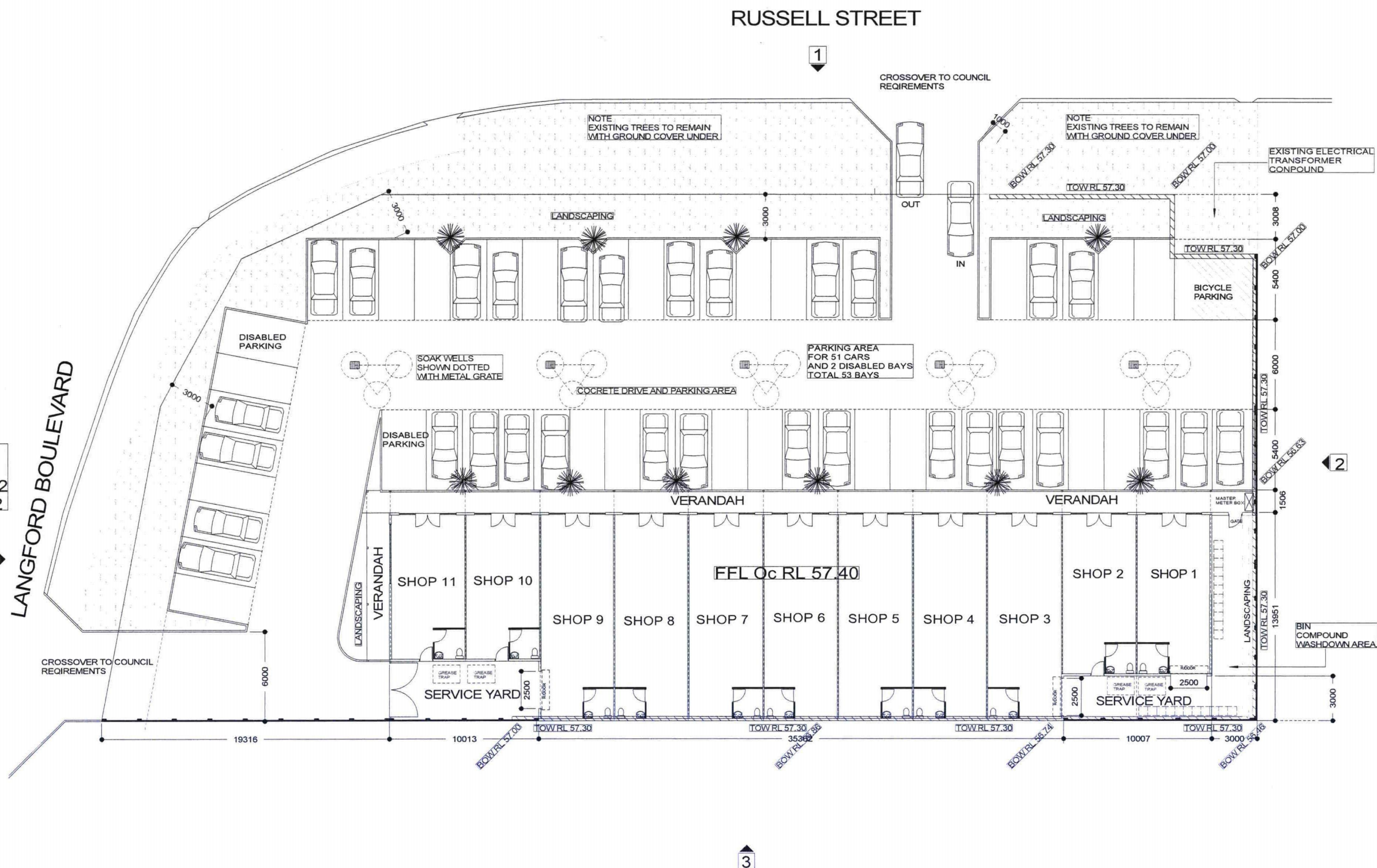
PROPOSED SHOPPING CENTER DEVELOPMENT FOR COMPEC PTY LTD.
ON LOT 2006 CORNER OF RUSSELL ROAD & LANGFORD BOULEVARD
MADELEY.

PETER MUSURUCA DESIGNS
8 JESSAMINE STREET DIANELLA
PH 92752710 & 0422888258

GROUND FLOOR PLAN
SCALE 1:100

BLOCK SIZE = 2548.781 M²
 LANDSCAPING 8% = 203.902 M²
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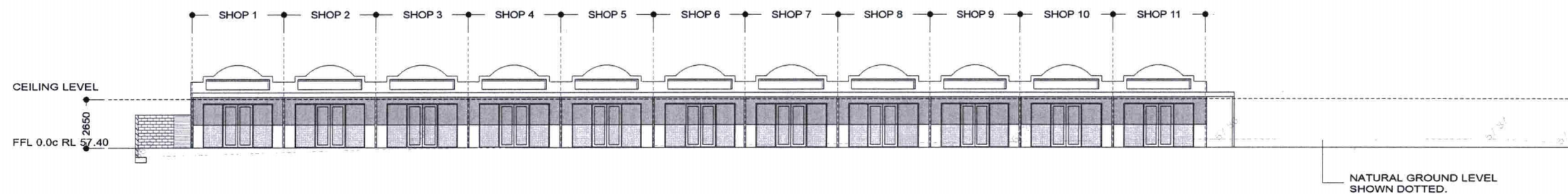


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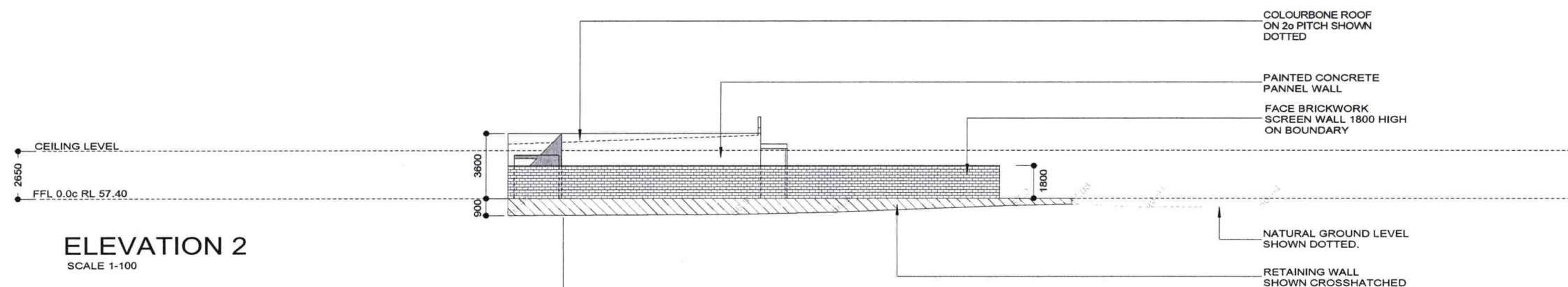
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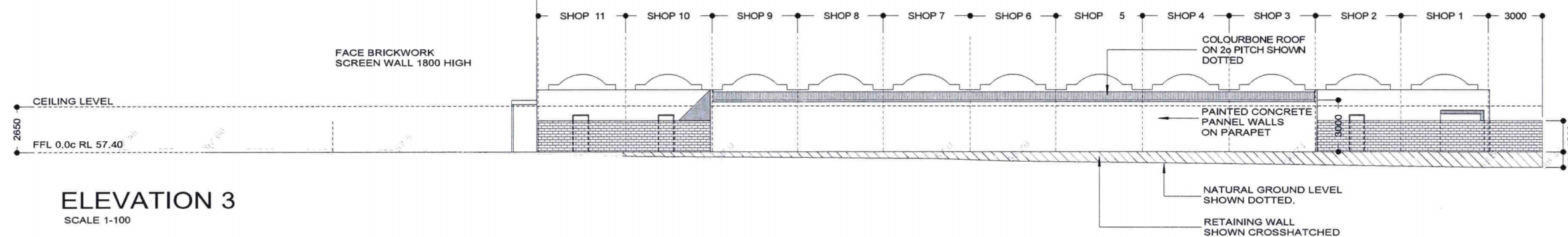
GROUND FLOOR PLAN
 SCALE 1:100



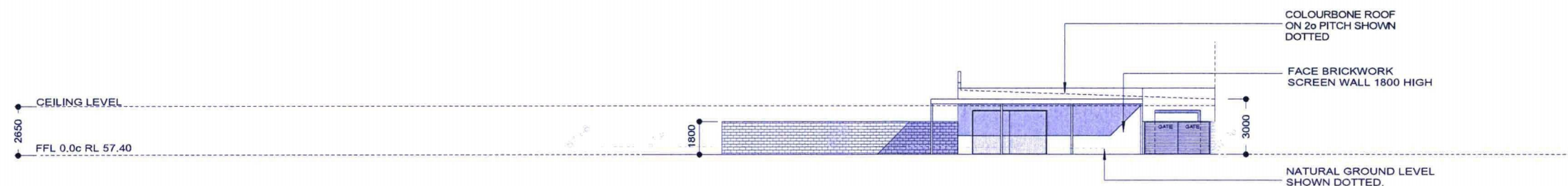
ELEVATION 1
SCALE 1-100



ELEVATION 2
SCALE 1-100



ELEVATION 3
SCALE 1-100



ELEVATION 4
SCALE 1-100

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DVC DONALD VEAL
CONSULTANTS

May 2016

Draft

Madeley Shops

Prepared For:
Compec Pty Ltd

Transport Impact Statement
Report



City of Wanneroo IM 14/6/2016

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Project: Madeley Shops TIS

DOCUMENT ISSUE AUTHORISATION

Issue	Rev	Date	Description	Prepared By	Checked By	Approved By
0	0	30/05/2016	Draft	DK	DNV	DNV

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Donald Veal Consultants Pty Ltd

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1. INTRODUCTION

1.1 BACKGROUND

Compec Pty Ltd commissioned Donald Veal Consultants to carry out a Transport Impact Assessment in support of the proposed development of a Local Shopping Centre on Lot 2006, on the corner of Russell Road and Langford Boulevard, Madeley, in the City of Wanneroo.

Proposed works consists of the construction of a new building for 'shop' purposes comprising a total gross floor area of 732.061 m² for the purposes of accommodating a variety of uses commonly found within a neighbourhood shopping centre.

The development plans are attached in **Appendix A**.

1.2 SITE LOCATION

The site is located on Lot 2006, on the corner of Russell Road and Langford Boulevard, Madeley. The site is located approximately 16 km north of the Perth CBD and around 6 km south of Wanneroo. The site location is shown in a regional context in **Figure 1.1** and in a local context in **Figure 1.2**.

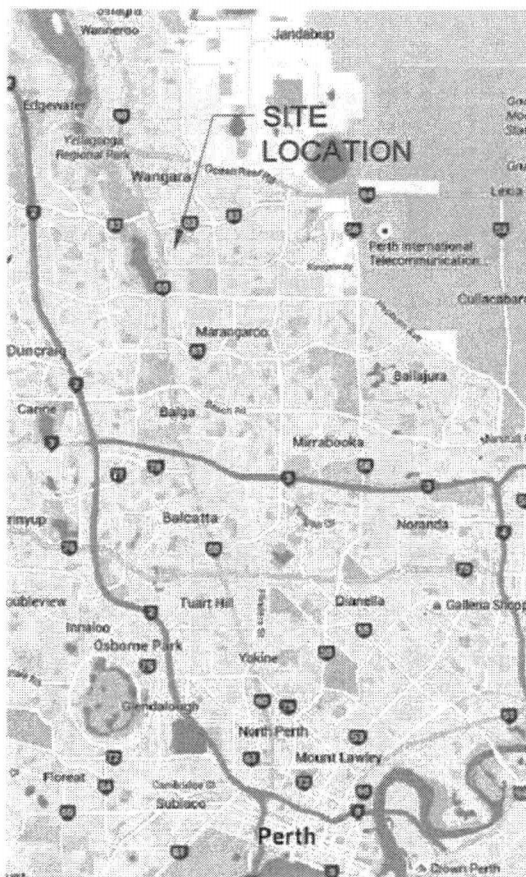


Figure 1.1: Site Location

Source: Google Maps



Figure 2.2: Aerial of Context with Surround

Source: IntraMaps_City of Wanneroo

1.3 SCOPE OF ASSESSMENT

This Transport Statement has been prepared in accordance with the Western Australian Planning Commission's (WAPC's) Transport Assessment Guidelines for Developments Volume 4 Individual Developments (2006). The level of transport assessment required is considered to be that of a 'moderate impact' development, one which generates between 10 and 100 vehicle trips during the peak hour period.

The intent of this statement is to provide the approving authority with sufficient transport information to confirm that the proponent has adequately considered the transport aspects on the development and that it would not have an adverse transport impact on the surrounding area.

A site visit was undertaken on Thursday 19th May 2016 to inspect the site, the surrounding road network and off street and on street parking in the area. Some site photographs were taken, some of which are reproduced in this report.

2 PROPOSED DEVELOPMENT

2.1 EXISTING LAND USE

The subject site is presently vacant land and is clear of any significant vegetation. The verge area fronting the site along Russell Road contains a number of large mature street trees within the road reserve. Additionally, there are electrical transformers located within the north east corner of the site.

2.2 PROPOSED LAND USES

The proposed development comprises the construction of a new neighbourhood shopping centre on Lot 2006 to cater for the needs and demands of the local community. The full development plans are attached in **Appendix A** and the proposed ground floor plan reproduced in **Figure 2.1**.

The proposed development comprises construction of a new building for 'shop' purposes to accommodate a variety of uses commonly found within a neighbourhood shopping centre. The design shows 11 shops ranging in size from about 50m² to 70m².

A total of 53 car parking bays are to be provided. This comprises of 51 general customer bays plus two ACROD bays. An area for bicycle parking is indicated in north east corner of proposed site plan.

Access to the development is to be provided from two separate two-way crossovers each measuring 6m in width. Access from Langford Boulevard is to be provided at the southern boundary of the site. Access from Russell Road is to be provided at around 19 m from eastern boundary of the site.

2.3 CONTEXT OF SURROUNDINGS

This lot is located within the City of Wanneroo, approximately 6km to the south of the Wanneroo CBD. The site is located on the south - east side of the Russell Road and Langford Boulevard roundabout. It is bounded to the east by Lot 78 Russell Road, which has single residential property on large size lot of 4878 m², to the west by residential Lot 227 Dalecross Avenue, to the north on the opposite side of Russell Road by residential Lots 935 to 937 Russell Road and to the south by residential Lots 2001 to 2005 Westbury Lane. Note that residential Lot 937 is named as Madeley Rise private estate.

Russell Road and Langford Boulevard are both local distributor roads.

2.4 HOURS OF OPERATION

No details on the proposed hours of operation are currently available and will depend upon the type of tenancies attracted to the development. In general, it is expected that shops will operate between 8AM and 9PM on weekdays and weekends.

The ground floor plan shows a rectangular building footprint divided into eleven shops, numbered 1 through 11 from right to left along the front facade. Shops 1-6 are single bays, while shops 7-11 are double bays. A central service yard is located between shops 9 and 10. The building features a verandah running along its top and bottom edges. To the north of the building is a parking area with 55 bays, including disabled parking spaces. Landscaping areas are designated around the perimeter. The site is bounded by Russell Street to the north and Langford Boulevard to the west. Key annotations include 'CROSSOVER TO COUNCIL REQUIREMENTS' at both street corners, 'EXISTING TREES TO REMAIN WITH GROUND COVER UNDER', and 'EXISTING ELECTRICAL TRANSFORMER COMPOUND'. Dimensions for various setbacks and lot widths are provided throughout the plan.

BLOCK SIZE = 2548.781 M²
LANDSCAPING 8% = 203.902 M²
CALCULATED AREA = 239.641 M²

SHOP 1 = 70.985M²
 SHOP 2 = 70.048M²
 SHOP 3 = 70.048M²
 SHOP 4 = 70.048M²
 SHOP 5 = 70.048M²
 SHOP 6 = 70.048M²
 SHOP 7 = 70.048 M²
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 SHOP 10 = 49.597M²
 SHOP 11 = 50.700M²

TOTAL = 732.061M²

**PROPOSED SHOPPING CENTER DEVELOPMENT FOR COMPEC PTY LTD.
 ON LOT 2006 CORNER OF RUSSELL ROAD & LANGFORD BOULEVARD
 MADDELEY.**

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GROUND FLOOR PLAN
 SCALE 1:500

Source: Compec Pty Ltd

3 VEHICULAR ACCESS

3.1 ACCESS ARRANGEMENTS

Access to the development is to be provided by two separate 6m wide two-way crossovers. Access from Langford Boulevard is to be provided at southern boundary of the site (refer **Figure 2.1**). This crossover is located at the maximum possible distance from the Russell Road/Langford Boulevard roundabout with clear lines of sight. Vegetation within the road reserve will need regular maintenance in order to ensure sight lines are not obscured by overgrown branches. Refer to **Photo 1**.



Photo 1: View along Langford Boulevard, looking southbound

The Russell Road access is proposed some 19m from eastern boundary of the site. This location is at a safe distance from the roundabout of Langford Road and Russell Road. The crossover is proposed between existing mature trees located in the road reserve. It is also clear of existing services comprising of a light pole and Telstra distribution point. It is recommended that adequate clearance is maintained between any retained services and the crossover. Sight lines should be checked at the detailed design stage to ensure the crossover achieves recommended distances as per Section 3 of AGRD04A-10 Guide to Road Design Part 4A Unsignalised and Signalised Intersections.

We also note that the crossover is likely to slope towards the road due to the topography of the site and road reserve in this location.

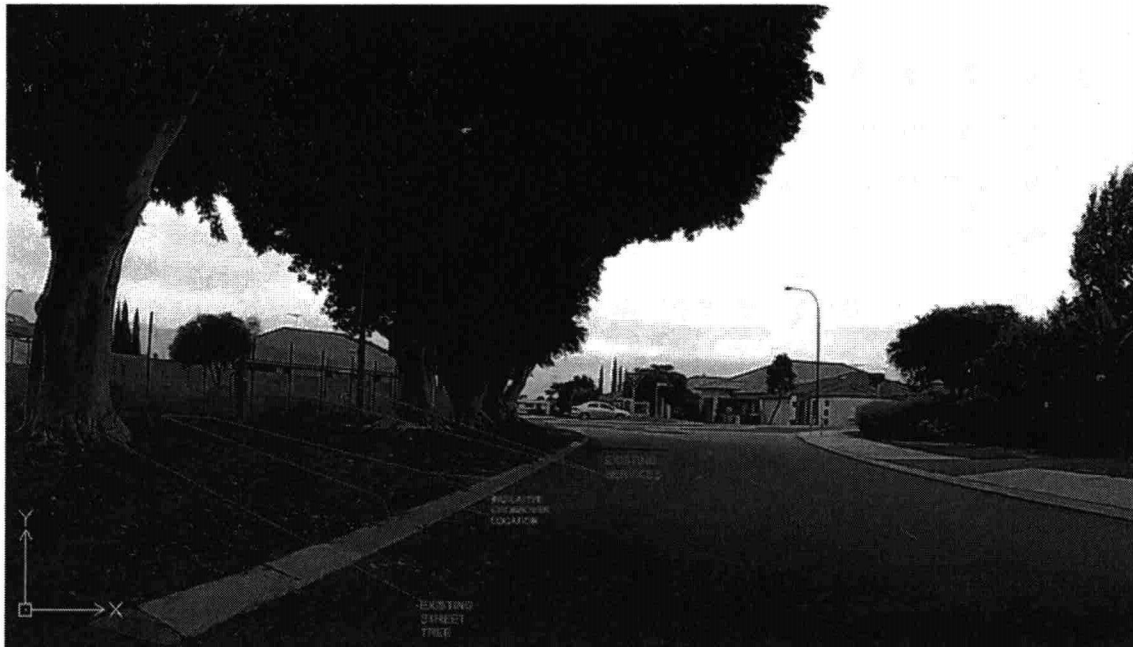


Photo 2: View along Russell Road, looking westbound

3.2 SERVICE VEHICLES

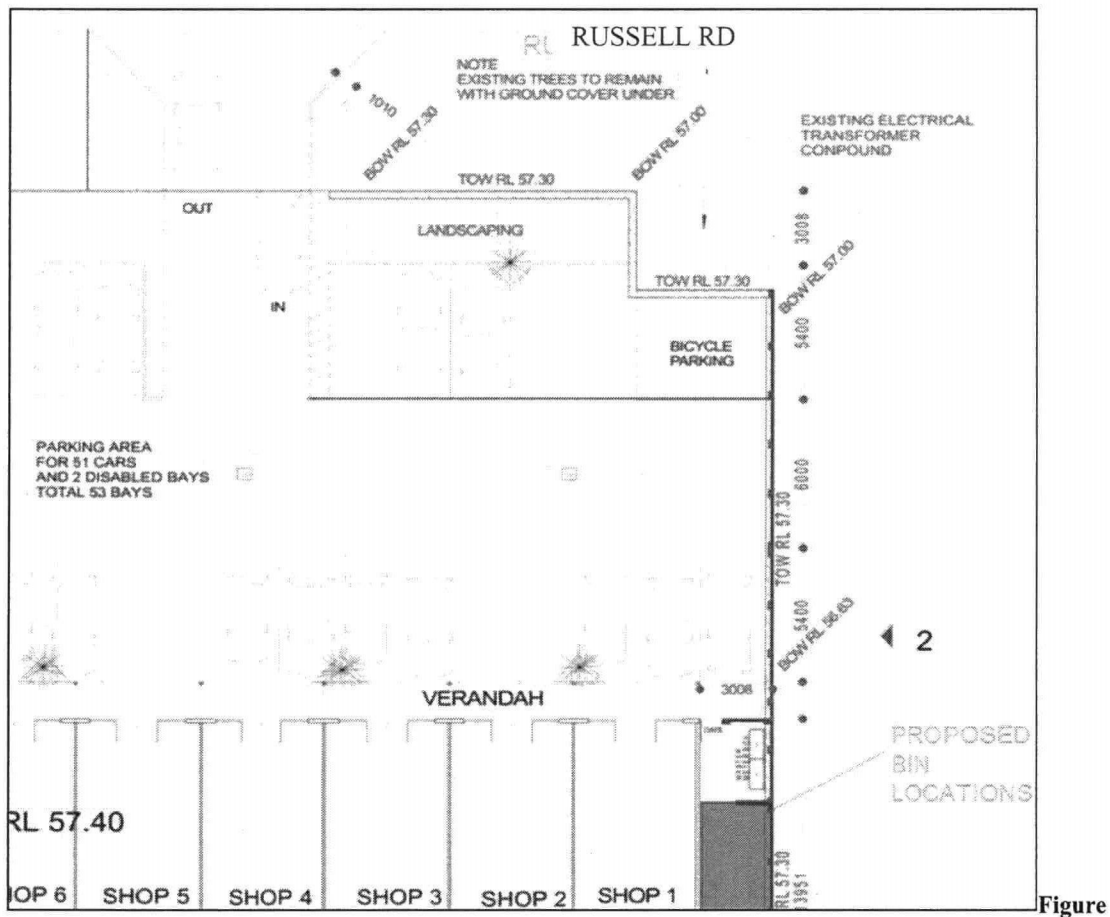
The proposed development will need to cater for the delivery of goods. A service yard zone has been provided within the site to facilitate such deliveries. The service yard is located behind shop numbers 10 and 11, as shown on **Figure 2.1**. Approximate dimensions of the service yard are 10m long by 3.5m wide.

To enter the service area vehicles will need to drive into the site in forward gear and reverse back into the service area from within the site. It would then exit in a forward gear.

It is assumed that deliveries will be restricted to standard rigid vehicles. The swept paths for the design vehicle should be checked at the detailed design stage to demonstrate that it can access the service area.

3.3 RUBBISH COLLECTION

The waste collection comprises of a number of individual general waste and recycling mobile garbage bins which will be collected by the standard side loading garbage truck from the verge side along Russell Road. These facilities are planned for within the southeast corner of the proposed building. A bin pad should be provided for this purpose. Ensure the bins do not compromise sight distance for drivers exiting the site whilst they are at the road side.



3.1: Proposed rubbish collection

Source: Compec Pty Ltd

3.4 DISABLED PARKING & PICK UP/SET DOWN

The development plan shows two accessible disabled parking bays (refer **Figure 2.1**). AS 2890.6 refers to the Building Code of Australia (BCA) for the requirement of number of accessible disabled parking bays. For Class 6 (a shop of building for the sale of goods by retail or the supply of services direct to the public, including an eating room, cafe, restaurant ...) one space is required for every 50 car parking spaces or part thereof. Accordingly, two accessible disabled bays satisfy the code.

3.5 PARKING REQUIREMENTS AS PER TOWN PLANNING SCHEME

The parking requirements for the proposed development under the District Planning Scheme No. 2 (DPS) is calculated and summarised in **Table 3.1**. In total, as per the DPS, some 51 bays are required and this is met by the proposed development design.

Table 3.1: Parking Requirements as per the District Planning Scheme

Development	Land use	Development capacity	DPS rate	Requirement under TPS
Local Shopping Centre	Shops & Take-Away	732.061 m ²	7 bays /100 m ²	51 car bays

4 TRAFFIC ANALYSIS

4.1 LANGFORD BOULEVARD AND RUSSELL ROAD

Langford Boulevard and Russell Road front the proposed development. As shown in **Figure 4.1**, Langford Boulevard and Russell Road are classified as Local Distributors under Main Roads WA's Functional Hierarchy. This classification is applied to roads that:

"...carry traffic within a cell and link District Distributors or Primary Distributors at the boundary, to access roads. The route of Local Distributors should discourage through traffic so that the cell formed by the grid of higher order distributor roads, only carries traffic belonging to, or serving the area. Local Distributors should accommodate buses, but discourage trucks... Local Distributors are managed by the local government." (Main Roads WA).

Local Distributors have a desirable maximum capacity of 6,000 vehicles per day (vpd).

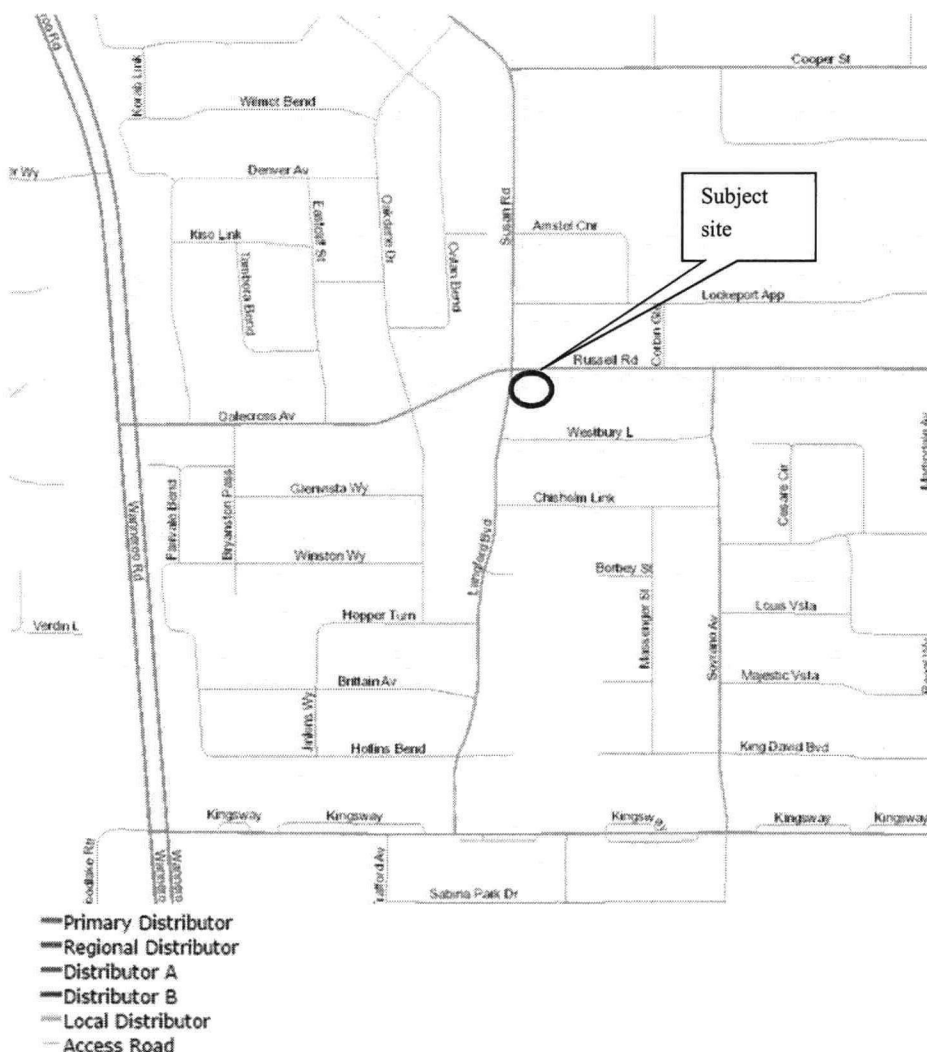


Figure 4.1: Road Hierarchy in the vicinity of proposed development

Source: MRWA Road Info Mapping

Langford Boulevard and Russell Road are undivided carriageways with one lane in each direction. The pavement width on Langford Boulevard is typically 7.0m, consisting of 2 x 3.5m lanes whilst the pavement width on Russell Road is typically 7.2m, consisting of 2 x 3.6m lanes.

As shown in **Figure 4.2**, the default urban speed of 50 km/h in built up areas applies within surrounding road network.

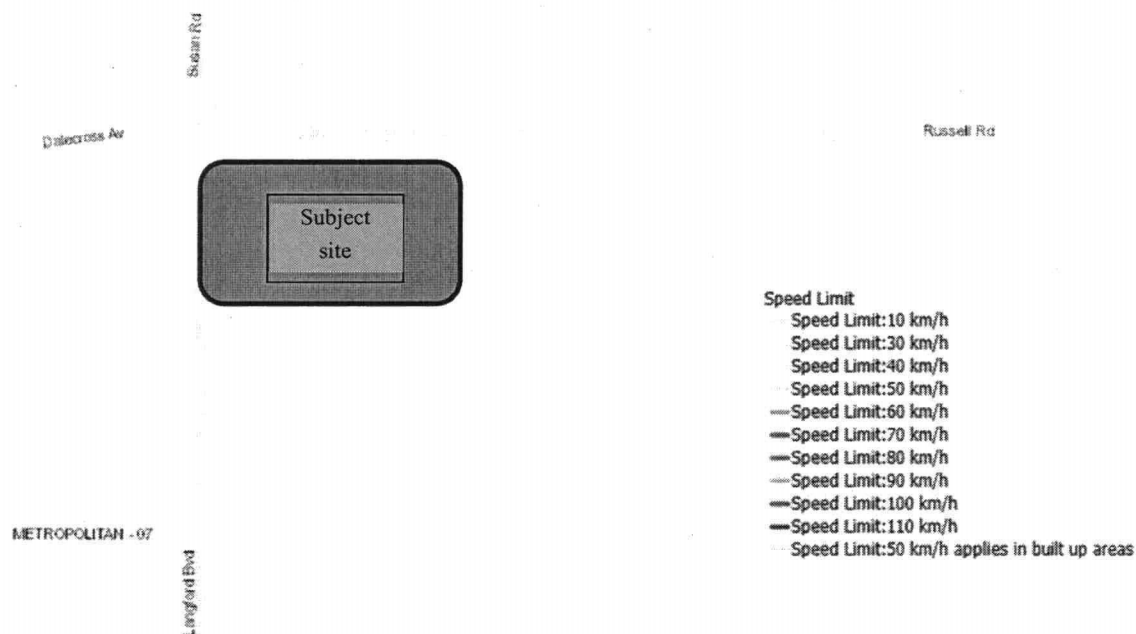


Figure 4.2: Speed limits in the vicinity of proposed development

Source: MRWA Road Info Mapping

4.2 TRAFFIC GENERATION AND IMPACT

Average traffic generation rates based on typical land uses within Local Shopping Centres have been adopted, resulting in:

- 50 daily vehicle trips per 100 m²;
- 5 trips per 100 m² during the weekday AM peak period; and
- 6 trips per 100 m² during the weekday PM peak period.

Generation rates were compared from a combination of sources including Trip Generation Manual, 7th Edition, Institution of Transportation Engineers (2003); Guide to Trip Generating Developments, Road Traffic Authority (NSW) (2002); and previous studies we have undertaken. The following indicates the type of variety that can be expected from typical mix of tenants at a local shopping centre.

4.2.1 RESTAURANT/CAFE

Traffic generation characteristics of restaurants/cafes can vary significantly depending on the nature and type of restaurant/cafe including operating hours. Average rates based on various surveys have been adopted in this instance as quoted by RTA guidelines are:

- 60 daily vehicle trips per 100 m²; and
- 5 trips per 100 m² during the weekday peak period.

Data from ITE suggests that approximately 40% of trips to restaurants/cafes (excluding fast food) can be passing trade. In this situation it is likely that the customers to the restaurants/cafes would be from within the local area either residing or working close by.

4.2.2 PHARMACY

Typical generation rates for a pharmacy as quoted by ITE guidelines are:

- 97 daily vehicle trips per 100 m²; and
- 3.4 and 9.1 trips per 100 m² during the weekday AM and PM peak periods.

These guidelines also suggest that approximately 50% of trade is actually from passing traffic and thus are already within the area.

4.2.3 GIFT SHOP

No documented trip rates are available for a gift store however, it is considered to be similar to an apparel store. Typical generation rates for an apparel store as quoted by ITE guidelines are:

- 66 daily vehicle trips per 100 m²; and
- 1.1 and 4.1 trips per 100 m² during the weekday AM and PM peak periods.

4.2.3 HAIRDRESSER

Typical generation rates for a hair salon as quoted by ITE guidelines are:

- 1.3 and 1.6 trips per 100 m² during the weekday am and pm peak periods.

No daily rates are provided by the guidelines.

4.2.5 BIKE SHOP

Typical generation rates for a bike shop as quoted by ITE guidelines are:

- 13 trips per 100 m² during the weekday pm peak periods.

No daily or am trip generation rates are quoted. It is assumed that the pm peak represents 10 percent of the daily traffic.

4.2.6 SUMMARY

Based on the estimated daily and peak hour trip generation as outlined in the previous sections the proposed development is estimated to generate up to 366 daily trips with 37 AM and 44 PM peak hour trips, respectively. This trip generation estimate takes into account allowance for a proportion of

passing trade as typically expected for the various land uses such as the restaurant/cafe, pharmacy and travel shop within the proposed Local Shopping Centre.

Langford Boulevard and Russell Road are classified as Local Distributor and able to carry 6,000vpd. The additional trips from the proposed accommodation rooms are therefore likely to have minimal impact to these roads.

Traffic volumes along Langford Boulevard and Russell Road were provided by City of Wanneroo. At the section of Russell Road west of Corbin Gate there were 2,211 vpd (AM Peak Hour 184 vph and PM Peak Hour 234 vph). Traffic volumes were collected during June 2013. On Langford Boulevard south from Russell Road there were 1,089 vpd recorded (AM Peak Hour 112 vph and PM Peak Hour 109 vph). These traffic volumes were collected during December 2015. The City of Wanneroo also advised that the average growth rates for Madeley are in the order of 1.5% to 2%.

Based on the traffic volumes along Langford Boulevard and Russell Road the proposed development will have minimal impact.

Reference was made to the Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossing, page 14, table 2.4 which states that when volumes at an intersection are less than 650 vph on major two lanes road with 100 vph on minor two way roads, a detailed analysis to demonstrate that adequate capacity is available is unlikely to be necessary. In this case the major roads are carrying less than 250vph in the peaks and therefore additional analysis on capacity grounds is not warranted.

4.3 CRASH DATA

MRWA's CARS report was sourced for the intersection of Langford Boulevard and Russell Road. The report also included any crashes that occurred within a distance of 100 m from the intersection. According to the MRWA's CARS report, there were 2 reported crashes in this vicinity in the most recent 5-year reporting period from 2011 to 2015. The recorded crashes included one crash that required medical assistance and one crash causing minor property damage. The detailed crash data is attached in **Appendix A**.

5 PUBLIC TRANSPORT ACCESS

5.1 NEAREST BUS/TRAIN ROUTES AND STOPS

Based on the data sourced from the Transperth website there are four bus stops within 150m radius from proposed development. Details of existing bus services are given in **Table 5.1**.

Table 5.1: Bus services

Bus Stop Number	Bus Location/Name	First Service	Last Service	Bus Route Numbers
(21946)	Russell Rd After Susan Rd Located 35m east from the proposed site.	8:24 AM	7:12 PM	352 Warradale Tce / Rockdale Pass
(21951)	Russell Rd Before Corbin Gate Located 95m east from the proposed site.	6:35 AM	4:50 PM	352 Whitfords Station
(21894)	Susan Rd After Russell Rd Located 80m north from the proposed site.	6:36 AM	4:51 PM	352 Whitfords Station
(21893)	Susan Rd Before Russell Rd Located 130m north from the proposed site.	8:23 AM	7:12 PM	352 Warradale Tce / Rockdale Pass



Figure 5.1: Nearest Bus stop - on Canning Highway, 80m east of Andrews Road

Source: Google Maps

There are no train stations close enough to be of service to the proposed site.

5.2 PEDESTRIAN/CYCLE ROUTES TO BUS/TRAIN STOPS

There are footpaths from the all existing bus stops to the proposed site. There are 2.0m concrete footpaths that run along Langford Boulevard and Russell Road as shown in **Figure 5.2**.



Figure 5.2: Existing footpath connections with bus stops

Source: Google Maps

6 PEDESTRIAN AND CYCLIST ACCESS FACILITIES

6.1 EXISTING FACILITIES WITHIN THE DEVELOPMENT

There is existing 2.0m wide footpath along the north side of Russell Road and east side of Langford Boulevard. Pedestrian crossings are provided on east and south side of the Langford Boulevard and Russell Road roundabout as shown in **Photos 3 and 4**. The portion of footpaths classified as shared paths are shown in the Department of Transport's Commuter Maps namely, *Stirling Bike Map*, an extract shown in **Figure 6.1**.

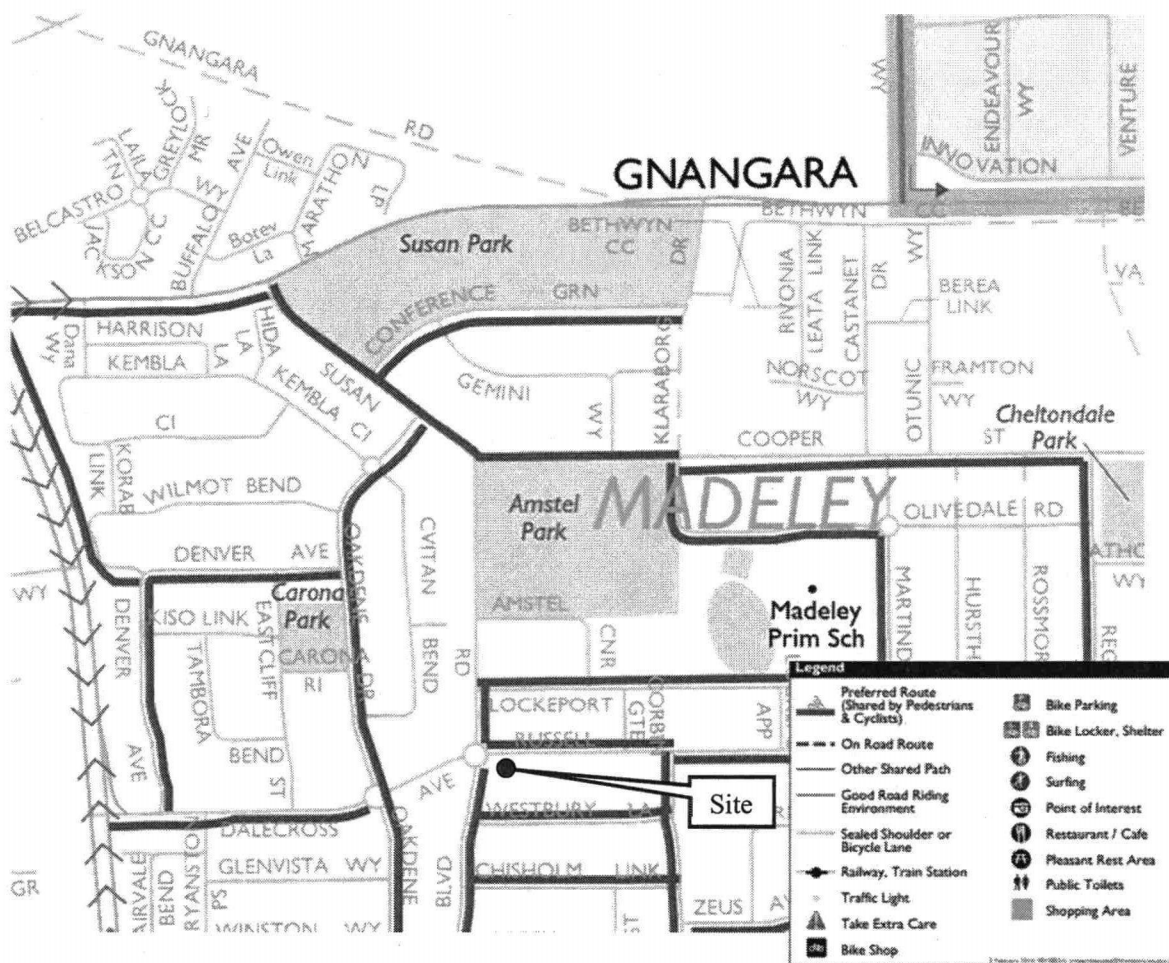


Figure 6.1: Existing shared paths within surrounding area

Source: Department of Transport



Photo 3: Pedestrian crossing on east approach of the Langford Boulevard and Russell Road roundabout, looking north



Photo 4: Pedestrian crossing on south approach of the Langford Boulevard and Russell Road roundabout, looking north

6.2 PROPOSED FACILITIES

Bicycle parking is proposed in the north east corner of the site. There will be an internal pedestrian path across the front of the shops under the verandah. See **Figure 2.1**. We recommend a pathway link between the footpath in the vicinity of the roundabout and the site, providing a direct route for pedestrians through to the shops. We recommend that the City of Wanneroo allow a reduction in parking of one or two bays to accommodate direct footpath links in recognition that this will provide good connectivity for local residents and to the bus stops close by.

7 CONCLUSION

7.1 SUMMARY

In conclusion, the proposed development of a Local Shopping Centre on Lot 2006, on the corner of Russell Road and Langford Boulevard, Madeley is forecast to operate satisfactorily from a traffic perspective. Our assessment has not found any traffic related issues that would form an impediment to the proposed development. The low impact of the traffic from the proposed development on the surrounding road network, good access/egress and circulation system within the development and adequate parking supply, all indicate a well planned development proposal.

The Russell Road and Langford Boulevard intersection would function acceptably under the proposed traffic conditions with insignificant impact, as would the proposed site access, egress and car parking circulation arrangements.

The internal circulation safely accommodates access by customers, staff and delivery vehicles.

The proposed parking supply of 53 bays meets the Scheme requirements by and is considered more than adequate to meet the likely parking demand with addition to close location of bus stops and to the pro-active inclusion of trip-end facilities to encourage people to cycle.

7.2 RECOMMENDATIONS

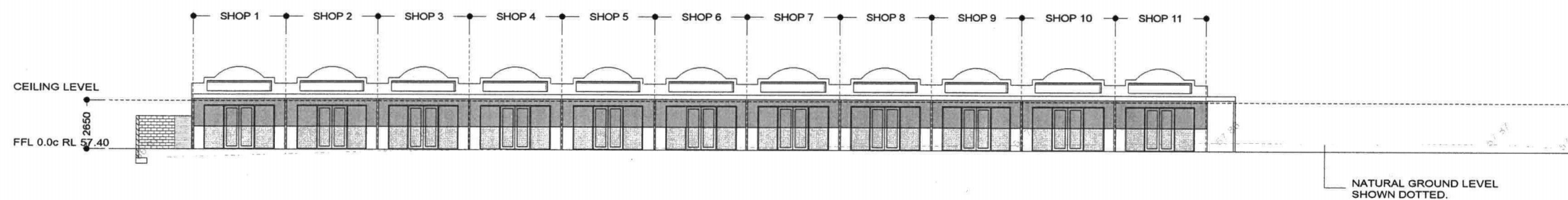
The following summarises the recommendations made in this transport impact statement report:

1. At the location of proposed crossovers:
Regularly maintain vegetation within the road reserve to ensure sight lines from the proposed crossovers are not obscured;
2. At the location of proposed crossover from Russell Road:
The crossover on Russell Road is proposed between existing mature trees located in the road reserve. Ensure sight lines for this crossover achieve recommended distances as per Section 3 of AGRD04A-10 Guide to Road Design Part 4A Unsignalised and Signalised Intersections;
3. For the service vehicle deliveries:
Detail design needs to include the swept paths for proposed design vehicle reversing into the service bay from within the site;
4. Rubbish collection:
Provide bin pad along Russell Road and a clear route for wheeling the bins to and from their place of storage. Also ensure sight distance is not compromised by the rubbish bins;
5. Proposed footpath connection:

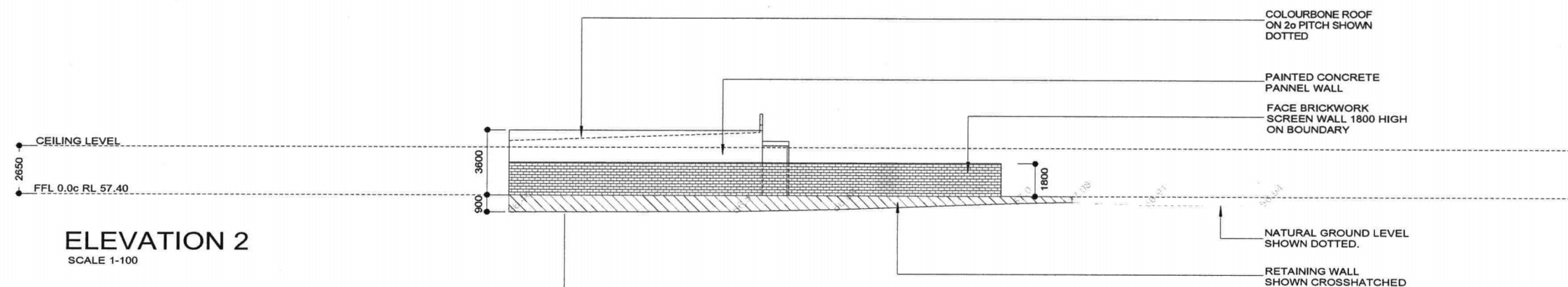
We recommend a pathway link between the footpath in the vicinity of the roundabout and the site, providing a direct route for pedestrians through to the shops. We recommend that the City of Wanneroo allow a reduction in parking of one or two bays to accommodate direct footpath links in recognition that this will provide good connectivity for local residents and to the bus stops located close by.

In our view, based on the analysis presented in this report, the outline development plan proposal presents no significant traffic capacity or road safety issues, and is therefore fully supported. We therefore recommend that from a traffic and transport perspective the development proposal be approved.

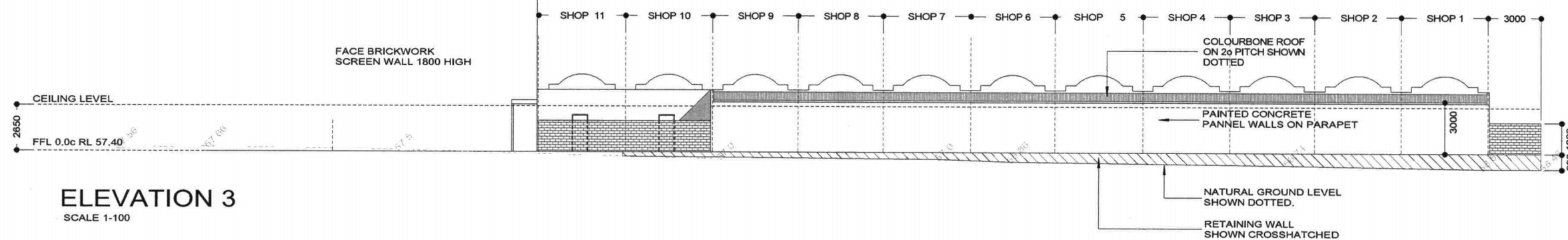
APPENDIX A: BACKGROUND DATA



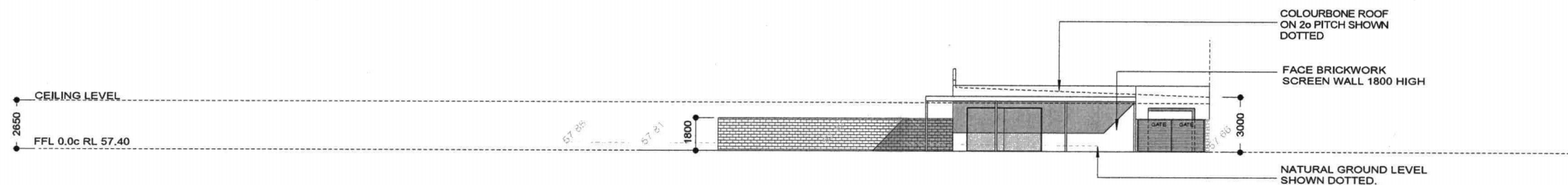
ELEVATION 1
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ELEVATION 2
SCALE 1-100



ELEVATION 3
SCALE 1-100



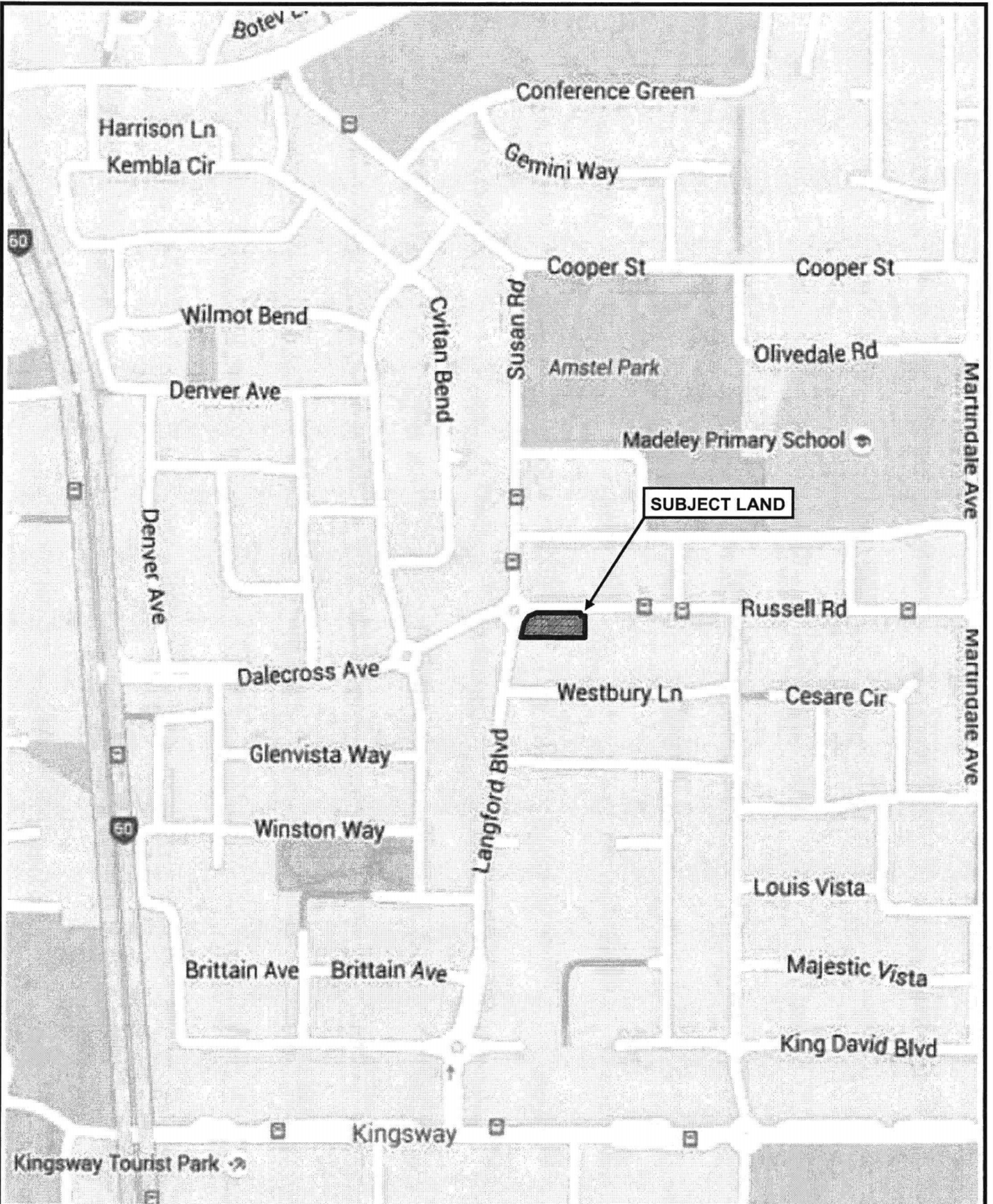
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Collision Diagram Report

Parameter	Value
Job Id	142983283
Intersection	60965 - RUSSELL RD & SUSAN RD & DALECROSS AV & LANGFORD BVD
Locus Distance	100m
From Date	2011
To Date	2015
Accident Type	All
Severity	All
Atmospheric Conditions	All
Horizontal Geometry	All
Vertical Geometry	All
Surface Type	All
Gender Of Driver	All
Road User Type	All
Crash Type	All
Rum Series	All
Crash Location	All
Traffic Control	All
Day of Week	All
Time of Day	All
Light Conditions	All
Hit Object Crashes	All
Approach Leg	All

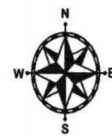


LOCATION PLAN

PLANNING APPLICATION
NEIGHBOURHOOD SHOPPING CENTRE
LOT 2006 (No.54) LANGFORD BOULEVARD,
MADELEY
CITY OF WANNEROO

PLAN 1

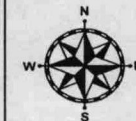
N.T.S





AERIAL SITE PLAN

PLANNING APPLICATION
NEIGHBOURHOOD SHOPPING CENTRE
LOT 2006 (No.54) LANGFORD BOULEVARD, MADELEY
CITY OF WANNEROO



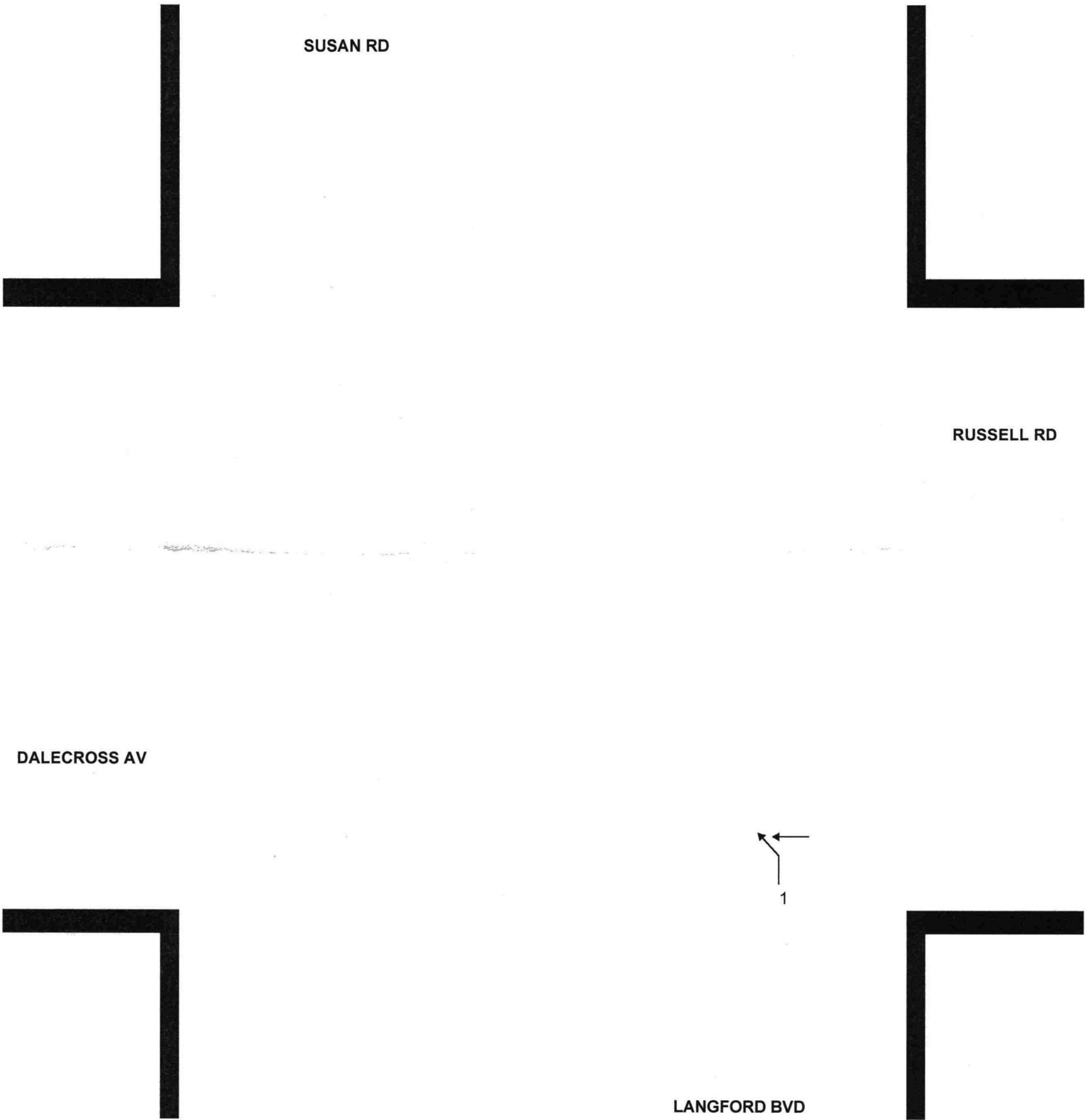
PLAN 3

SCALE. N.T.S

Source: Landgate

Collision Diagram Report

Intersection: 60965 - RUSSELL RD & SUSAN RD & DALECROSS AV & LANGFORD BVD



Note

The crashes depicted above are placed figuratively, the exact location of the crashes is not indicated in this diagram.

Only RUM codes 11-19, 22, 31, 32, 33 ,76 & 77 display within the collision diagram

Crash Factor Matrix

Parameter	Value
Job Id	142983283
Intersection	60965 - RUSSELL RD & SUSAN RD & DALECROSS AV & LANGFORD BVD
Locus Distance	100m
From Date	2011
To Date	2015
Accident Type	All
Severity	All
Atmospheric Conditions	All
Horizontal Geometry	All
Vertical Geometry	All
Surface Type	All
Gender Of Driver	All
Road User Type	All
Crash Type	All
Rum Series	All
Crash Location	All
Traffic Control	All
Day of Week	All
Time of Day	All
Light Conditions	All
Hit Object Crashes	All
Approach Leg	All

Crash Factor Matrix

Crash Factor Matrix

ROAD USE MOVEMENT (RUM) CODES

	0	1	2	3	4	5	6	7	8	9
	PEDESTRIAN on foot, in toy/pram	INTERSECTION vehicles from adjacent approaches	VEHICLES FROM OPPOSING DIRECTIONS	VEHICLES FROM ONE DIRECTION	MANOEUVRING	OVERTAKING	ON PATH	OFF STRAIGHT, ON STRAIGHT	OFF PATH, ON CURVE	PASSENGERS AND MISCELLANEOUS
1	 NEAR SIDE 1	 THRU-THRU 11	 SIDE SWIPE HEAD ON 21	 REAR END 31		 HEAD ON 51	 PARKED 61	 OFF CARRIAGEWAY TO LEFT 71	 OFF CARRIAGEWAY RIGHT BEND 81	 FELL IN/FROM VEHICLE 91
2	 EMERGING 2	 RIGHT-THRU 12	 THRU-RIGHT 22	 LEFT REAR 32	 LEAVING PARKING 42	 OUT OF CONTROL 52	 DOUBLE PARKED 62	 LEFT OFF CARRIAGEWAY INTO OBJECT/VEHICLE 72	 OFF RIGHT BEND INTO OBJECT/VEHICLE 82	 LOAD STRUCK VEHICLE 92
3	 FAR SIDE 3	 LEFT-THRU 13	 RIGHT LEFT 23	 RIGHT REAR 33	 PARKING 43	 PULLING OUT 53	 ACCIDENT OR BROKEN DOWN 63	 OFF CARRIAGEWAY TO RIGHT 73	 OFF CARRIAGEWAY LEFT BEND 83	 STRUCK TRAIN 93
4	 PLAYING, WORKING LYING, STANDING ON CARRIAGEWAY 4	 THRU-RIGHT 14	 RIGHT RIGHT 24	 U TURN 34	 PARKING VEHICLES ONLY 44	 CUTTING IN 54	 CAR DOOR 64	 RIGHT OFF CARRIAGEWAY INTO OBJECT/VEHICLE 74	 OFF LEFT BEND INTO OBJECT/VEHICLE 84	 STRUCK RAILWAY XING FURNITURE 94
5	 WALKING WITH TRAFFIC 5	 RIGHT-RIGHT 15	 THRU LEFT 25	 LANE SIDE SWIPE 35	 REVERSING 45	 PULLING OUT REAR END 55	 PERMANENT OBSTRUCTION 65	 OUT OF CONTROL ON CARRIAGEWAY 75	 OUT OF CONTROL ON CARRIAGEWAY 85	 ANIMAL OFF CARRIAGEWAY 95
6	 FACING TRAFFIC 6	 LEFT-RIGHT 16	 LEFT LEFT 26	 LANE CHANGE RIGHT 36	 REVERSING INTO FIXED OBJECT 46	 O.T.-RT 56	 TEMPORARY ROADWORKS 66	 LEFT TURN 76		 PARKED CAR RAN AWAY 96
7	 DRIVEWAY 7	 THRU-LEFT 17	 U TURN 27	 LANE CHANGE LEFT 37	 LEAVING DRIVEWAY 47		 TEMPORARY OBJECT ON CARRIAGEWAY 67	 RIGHT TURN 77		 VEHICLE MOVEMENTS NOT KNOWN 97
8	 ON FOOTWAY 8	 RIGHT-LEFT 18		 RIGHT TURN S/S 38	 LOADING BAY 48					
9	 STRUCK WHILE BOARDING OR ALIGHTING 9	 LEFT-LEFT 19		 LEFT TURN S/S 39	 FROM FOOTWAY 49		 ON CARRIAGEWAY 69			
	OTHER 98	OTHER 10	OTHER 20	OTHER 30	OTHER 40	OTHER 50	OTHER 60 (MISSILE/ FLYING OBJECT)	OTHER 70	OTHER 80	OTHER 90

Crash Factor Matrix

Crash Factor Matrix

Intersection: 60965 - RUSSELL RD & SUSAN RD & DALECROSS AV & LANGFORD BVD

ROAD USER MOVEMENT CODE	Number of Crashes by Year						Severity					Surface			Light Condition					Day of Week							Time of Day											
	2011	2012	2013	2014	2015	Total	Fatal	Hospital	Medical	PDO Major	PDO Minor	Dry	Wet	Not Specified	Day	Dusk/Dawn	Dark lights On	Dark lights off	Dark no lights	Not Specified	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	00:00 - 02:59	03:00 - 05:59	06:00 - 08:59	09:00 - 11:59	12:00 - 14:59	15:00 - 17:59	18:00 - 20:59	21:00 - 23:59	Not Specified		
10 Series : INTERSECTION																																						
17 - Thru - Left					1	1			1			1				1									1					1								
10 Series Total					1	1			1			1				1									1					1								
60 Series : ON PATH																																						
67 - Temp Obj On Cway			1			1					1	1					1						1												1			
60 Series Total			1			1					1	1					1						1												1			
All RUM Codes	0	0	1	0	1	2	0	0	1	0	1	2	0	0	0	1	1	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	

Crash Factor Matrix

Weekly Vehicle Counts (Virtual Week)**VirtWeeklyVehicle-380****Site:** T00764--M8--0.1NS**Description:** LANGFORD BLVD SOUTH OF RUSSELL ROAD MADELEY <50>**Filter time:** 12:00 Monday, 7 December 2015 => 9:00 Tuesday, 15 December 2015**Scheme:** Vehicle classification (AustRoads94)**Filter:** Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100)

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
0000-0100	2.0	4.5	3.0	0.0	4.0	14.0	7.0	3.0	4.9
0100-0200	3.0	2.5	2.0	1.0	4.0	0.0	6.0	2.5	2.6
0200-0300	2.0	0.0	1.0	2.0	2.0	4.0	0.0	1.2	1.4
0300-0400	0.0	3.0	1.0	3.0	0.0	1.0	5.0	1.7	2.0
0400-0500	3.0	6.0	4.0	3.0	6.0	8.0	1.0	4.7	4.6
0500-0600	19.0	18.0	21.0	17.0	16.0	7.0	6.0	18.2	15.3
0600-0700	42.0	38.5	32.0	38.0	43.0	10.0	8.0	38.7	31.3
0700-0800	76.0	81.0	66.0	65.0	66.0	46.0	23.0	72.5	63.0
0800-0900	108.0	117.5	113.0	122.0	112.0	54.0	36.0	115.0	97.5
0900-1000	62.0	52.0	67.0	78.0	57.0	74.0	60.0	63.2	64.3
1000-1100	32.0	41.0	51.0	43.0	61.0	93.0	69.0	45.6	55.7
1100-1200	45.0	42.0	47.0	33.0	49.0	71.0	69.0	43.2	50.9
1200-1300	50.5	30.0	52.0	50.0	45.0	92.0	51.0	46.3	52.6
1300-1400	36.0	50.0	44.0	49.0	42.0	62.0	48.0	42.8	45.9
1400-1500	53.0	63.0	82.0	49.0	57.0	65.0	81.0	59.5	62.9
1500-1600	103.0	112.0	104.0	113.0	118.0	58.0	40.0	108.8	93.9
1600-1700	82.0	71.0	88.0	110.0	72.0	62.0	63.0	84.2	78.8
1700-1800	79.0	69.0	72.0	92.0	80.0	78.0	56.0	78.5	75.6
1800-1900	76.0	63.0	72.0	58.0	78.0	62.0	51.0	70.5	67.0
1900-2000	44.0	46.0	52.0	34.0	62.0	36.0	40.0	47.0	44.8
2000-2100	28.5	36.0	30.0	46.0	43.0	33.0	25.0	35.3	33.8
2100-2200	22.0	33.0	26.0	33.0	32.0	25.0	33.0	28.0	28.3
2200-2300	9.5	15.0	14.0	14.0	30.0	32.0	11.0	15.3	16.9
2300-2400	5.5	6.0	11.0	3.0	10.0	14.0	13.0	6.8	8.5
Totals									
0700-1900	802.5	791.5	858.0	862.0	837.0	817.0	647.0	830.2	808.0
0600-2200	939.0	945.0	998.0	1013.0	1017.0	921.0	753.0	979.2	946.0
0600-0000	954.0	966.0	1023.0	1030.0	1057.0	967.0	777.0	1001.3	971.4
0000-0000	983.0	1000.0	1055.0	1056.0	1089.0	1001.0	802.0	1032.5	1002.1
AM Peak									
	0800	0800	0800	0800	0800	1000	1100		
	108.0	117.5	113.0	122.0	112.0	93.0	69.0		
PM Peak									
	1500	1500	1500	1500	1500	1200	1400		
	103.0	112.0	104.0	113.0	118.0	92.0	81.0		

* - No data.

MetroCount Traffic Executive Class Speed Matrix

ClassMatrix-381 -- English (ENA)

Datasets:

Site: [T00764--M8--] LANGFORD BLVD SOUTH OF RUSSELL ROAD MADELEY <50>
Attribute: [-31.808750 +115.824775]
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 12:00 Monday, 7 December 2015 => 10:54 Tuesday, 15 December 2015,
Zone:
File: T00764--M8-- 0 2015-12-15 1056.EC0 (Plus)
Identifier: J427CNPDP MC55-3 [MC50] (c)Microcom 11/02/99
Algorithm: Factory default axle (v4.06)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 12:00 Monday, 7 December 2015 => 9:00 Tuesday, 15 December 2015 (7.875)
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, East, South, West (bound), P = North
Separation: Headway > 0 sec, Span 0 - 100 metre
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (metre, kilometre, m/s, km/h, kg, tonne)
In profile: Vehicles = 7846 / 7906 (99.24%)

Class Speed Matrix

ClassMatrix-381

Site:

T00764--M8--0.1NS

Description:

LANGFORD BLVD SOUTH OF RUSSELL ROAD MADELEY <50>

Filter time:

12:00 Monday, 7 December 2015 => 9:00 Tuesday, 15 December 2015

Scheme:

Vehicle classification (AustRoads94)

Filter:

Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100)

Speed (km/h)	Class												Speed Totals	
	SV 1	SVT 2	TB2 3	TB3 4	T4 5	ART3 6	ART4 7	ART5 8	ART6 9	BD 10	DRT 11	TRT 12		
10 - 20	39	.	4	.	1	.	.	1	.	.	.	.	45	0.6%
20 - 30	312	6	18	4	1	.	1	.	.	.	.	.	342	4.4%
30 - 40	2203	44	131	2	.	4	6	.	.	.	.	.	2390	30.5%
40 - 50	4342	42	149	.	.	.	.	.	.	.	.	.	4533	57.8%
50 - 60	501	1	17	.	.	.	.	.	.	.	.	.	519	6.6%
60 - 70	15	.	.	.	.	.	.	.	.	.	.	.	15	0.2%
70 - 80	2	.	.	.	.	.	.	.	.	.	.	.	2	0.0%
80 - 90	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
90 - 100	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
100 - 110	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
110 - 120	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
120 - 130	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
130 - 140	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
140 - 150	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
Class Totals	7414	93	319	6	2	4	7	1	0	0	0	0	7846	
	94.5%	1.2%	4.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		

MetroCount Traffic Executive Speed Statistics

SpeedStat-382 -- English (ENA)

Datasets:

Site: [T00764--M8--] LANGFORD BLVD SOUTH OF RUSSELL ROAD MADELEY <50>
Attribute: [-31.808750 +115.824775]
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 12:00 Monday, 7 December 2015 => 10:54 Tuesday, 15 December 2015,
Zone:
File: T00764--M8-- 0 2015-12-15 1056.EC0 (Plus)
Identifier: J427CNPd MC55-3 [MC50] (c)Microcom 11/02/99
Algorithm: Factory default axle (v4.06)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 12:00 Monday, 7 December 2015 => 9:00 Tuesday, 15 December 2015 (7.875)
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, East, South, West (bound), P = North
Separation: Headway > 0 sec, Span 0 - 100 metre
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (metre, kilometre, m/s, km/h, kg, tonne)
In profile: Vehicles = 7846 / 7906 (99.24%)

Speed Statistics

SpeedStat-382

Site: T00764--M8--0.1NS
Description: LANGFORD BLVD SOUTH OF RUSSELL ROAD MADELEY <50>
Filter time: 12:00 Monday, 7 December 2015 => 9:00 Tuesday, 15 December 2015
Scheme: Vehicle classification (AustRoads94)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100)

Vehicles = 7846

Posted speed limit = 50 km/h, Exceeding = 536 (6.83%), Mean Exceeding = 52.96 km/h

Maximum = 80.0 km/h, Minimum = 10.3 km/h, Mean = 41.6 km/h

85% Speed = 47.5 km/h, 95% Speed = 50.8 km/h, Median = 42.1 km/h

20 km/h Pace = 31 - 51, Number in Pace = 7036 (89.68%)

Variance = 41.50, Standard Deviation = 6.44 km/h

Speed Bins (Partial days)

Speed	Bin	Below	Above	Energy	vMult	n * vMult
0 - 10	0 0.0%	0 0.0%	7846 100.0%	0.00	0.00	0.00
10 - 20	45 0.6%	45 0.6%	7801 99.4%	0.00	0.00	0.00
20 - 30	342 4.4%	387 4.9%	7459 95.1%	0.00	0.00	0.00
30 - 40	2390 30.5%	2777 35.4%	5069 64.6%	0.00	0.00	0.00
40 - 50	4533 57.8%	7310 93.2%	536 6.8%	0.00	0.00	0.00
50 - 60	519 6.6%	7829 99.8%	17 0.2%	0.00	0.00	0.00
60 - 70	15 0.2%	7844 100.0%	2 0.0%	0.00	0.00	0.00
70 - 80	2 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
80 - 90	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
90 - 100	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
100 - 110	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
110 - 120	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
120 - 130	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
130 - 140	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
140 - 150	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
150 - 160	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
160 - 170	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
170 - 180	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
180 - 190	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00
190 - 200	0 0.0%	7846 100.0%	0 0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

Limit	Below	Above
0 | 50 (PSL)	7310 93.2%	536 6.8%

MetroCount Traffic Executive **Weekly Vehicle Counts (Virtual Week)**

VirtWeeklyVehicle-515 -- English (ENA)

Datasets:

Site: [T02683-M6-] RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Direction: 6 - West bound A>B, East bound B>A. **Lane:** 0
Survey Duration: 14:00 Tuesday, 4 June 2013 => 11:05 Wednesday, 12 June 2013
Zone:
File: T02683-M6- 0 2013-06-12 1106.EC0 (Plus)
Identifier: 2480HH4Y MC56-6 [MC55] (c)Microcom 02/03/01
Algorithm: Factory default axle (v4.02)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, East, South, West (bound), P = West
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 15374 / 15519 (99.07%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-515

Site: T02683-M6-.0.0WE
Description: RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Scheme: Vehicle classification (AustRoads94)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	9.0	2.0	4.5	6.0	6.0	21.0	36.0	5.3	11.1
0100-0200	7.0	3.0	1.5	2.0	3.0	7.0	15.0	3.0	5.0
0200-0300	3.0	5.0	2.0	3.0	4.0	12.0	9.0	3.2	5.0
0300-0400	5.0	5.0	7.5	6.0	9.0	9.0	7.0	6.7	7.0
0400-0500	9.0	6.0	8.0	9.0	8.0	3.0	3.0	8.0	6.8
0500-0600	35.0	29.0	36.0	34.0	29.0	7.0	7.0	33.2	26.6
0600-0700	75.0	87.0	84.5	88.0	77.0	22.0	10.0	82.7	66.0
0700-0800	138.0	124.0	126.0	139.0	117.0	49.0	28.0	128.3	105.9
0800-0900	190.0	103.0	184.0	196.0	184.0	101.0	61.0	171.4	145.6
0900-1000	100.0	93.0	121.0	109.0	115.0	151.0	78.0	107.6	109.6
1000-1100	84.0	88.0	78.0	95.0	98.0	167.0	107.0	88.6	102.4
1100-1200	97.0	82.0	100.0	86.0	100.0	215.0	112.0	93.0	113.1
1200-1300	91.0	104.0	103.0	88.0	94.0	219.0	155.0	96.0	122.0
1300-1400	85.0	82.0	88.0	87.0	111.0	153.0	105.0	90.6	101.6
1400-1500	118.0	130.5	154.0	132.0	160.0	218.0	118.0	137.5	145.1
1500-1600	203.0	191.0	175.0	220.0	234.0	159.0	112.0	202.3	185.6
1600-1700	204.0	186.0	210.0	159.0	176.0	151.0	93.0	186.8	170.6
1700-1800	200.0	214.0	240.0	210.0	213.0	191.0	136.0	215.2	202.3
1800-1900	142.0	145.5	146.0	142.0	180.0	128.0	72.0	150.2	137.6
1900-2000	78.0	92.0	113.0	100.0	99.0	71.0	62.0	95.7	88.4
2000-2100	39.0	62.5	67.0	63.0	59.0	54.0	50.0	58.8	57.1
2100-2200	43.0	48.5	57.0	51.0	51.0	55.0	43.0	49.8	49.6
2200-2300	22.0	18.0	26.0	29.0	52.0	42.0	21.0	27.5	28.5
2300-2400	9.0	8.0	8.0	14.0	32.0	42.0	7.0	13.2	16.0
Totals									
0700-1900	1652.0	1543.0	1725.0	1663.0	1782.0	1902.0	1177.0	1667.5	1641.4
0600-2200	1887.0	1833.0	2046.5	1965.0	2068.0	2104.0	1342.0	1954.5	1902.5
0600-0000	1918.0	1859.0	2080.5	2008.0	2152.0	2188.0	1370.0	1995.2	1947.0
0000-0000	1986.0	1909.0	2140.0	2068.0	2211.0	2247.0	1447.0	2054.5	2008.5
AM Peak	0800	0700	0800	0800	0800	1100	1100		
	190.0	124.0	184.0	196.0	184.0	215.0	112.0		
PM Peak	1600	1700	1700	1500	1500	1200	1200		
	204.0	214.0	240.0	220.0	234.0	219.0	155.0		

* - No data.

MetroCount Traffic Executive Class Speed Matrix

ClassMatrix-516 -- English (ENA)

Datasets:

Site: [T02683-M6-] RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Direction: 6 - West bound A>B, East bound B>A. **Lane:** 0
Survey Duration: 14:00 Tuesday, 4 June 2013 => 11:05 Wednesday, 12 June 2013
Zone:
File: T02683-M6- 0 2013-06-12 1106.EC0 (Plus)
Identifier: 2480HH4Y MC56-6 [MC55] (c)Microcom 02/03/01
Algorithm: Factory default axle (v4.02)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, East, South, West (bound), P = West
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 15374 / 15519 (99.07%)

Class Speed Matrix**ClassMatrix-516**

Site: T02683-M6-.0.0WE
Description: RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Scheme: Vehicle classification (AustRoads94)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0)

<u>Speed (km/h)</u>														<u>Speed Totals</u>	
		Class													
		1	2	3	4	5	6	7	8	9	10	11	12		
10 - 20		19	.	1	2	.	.	.	.	.	.	.	.	22	0.1%
20 - 30		87	.	4	.	.	.	1	.	1	.	.	.	93	0.6%
30 - 40		369	12	44	5	.	.	1	.	.	.	.	.	431	2.8%
40 - 50		3039	35	162	11	7	6	10	.	2	.	.	.	3272	21.3%
50 - 60		7801	79	308	15	.	4	4	.	1	.	.	.	8212	53.4%
60 - 70		2803	29	88	7	.	2	1	.	.	.	.	.	2930	19.1%
70 - 80		333	2	22	.	.	.	.	.	.	.	.	.	357	2.3%
80 - 90		40	.	2	.	.	.	.	.	.	.	.	.	42	0.3%
90 - 100		11	.	.	.	.	.	.	.	.	.	.	.	11	0.1%
100 - 110		4	.	.	.	.	.	.	.	.	.	.	.	4	0.0%
110 - 120		.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
120 - 130		.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
130 - 140		.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
140 - 150		.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
150 - 160		.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
		14506	157	631	40	7	12	17	0	4	0	0	0	15374	
		94.4%	1.0%	4.1%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
		Class Totals													

MetroCount Traffic Executive Speed Statistics

SpeedStat-517 -- English (ENA)

Datasets:

Site: [T02683-M6-] RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Direction: 6 - West bound A>B, East bound B>A. **Lane:** 0
Survey Duration: 14:00 Tuesday, 4 June 2013 => 11:05 Wednesday, 12 June 2013
Zone:
File: T02683-M6- 0 2013-06-12 1106.EC0 (Plus)
Identifier: 2480HH4Y MC56-6 [MC55] (c)Microcom 02/03/01
Algorithm: Factory default axle (v4.02)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range: 10 - 160 km/h.
Direction: North, East, South, West (bound), P = West
Separation: All - (Headway)
Name: Default Profile
Scheme: Vehicle classification (AustRoads94)
Units: Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile: Vehicles = 15374 / 15519 (99.07%)

Speed Statistics

SpeedStat-517

Site: T02683-M6-.0.0WE
Description: RUSSEL RD WEST OF CORBIN GATE MADELEY <50>
Filter time: 14:00 Tuesday, 4 June 2013 => 8:00 Wednesday, 12 June 2013
Scheme: Vehicle classification (AustRoads94)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NESW) Sp(10,160) Headway(>0)

Vehicles = 15374

Posted speed limit = 50 km/h, Exceeding = 11556 (75.17%), Mean Exceeding = 57.78 km/h

Maximum = 101.2 km/h, Minimum = 13.1 km/h, Mean = 54.5 km/h

85% Speed = 61.6 km/h, 95% Speed = 67.0 km/h, Median = 54.4 km/h

20 km/h Pace = 45 - 65, Number in Pace = 12820 (83.39%)

Variance = 64.64, Standard Deviation = 8.04 km/h

Speed Bins (Partial days)

Speed	Bin	Below	Above	Energy	vMult	n * vMult
0 - 10	0 0.0%	0 0.0%	15374 100.0%	0.00	0.00	0.00
10 - 20	22 0.1%	22 0.1%	15352 99.9%	0.00	0.00	0.00
20 - 30	93 0.6%	115 0.7%	15259 99.3%	0.00	0.00	0.00
30 - 40	431 2.8%	546 3.6%	14828 96.4%	0.00	0.00	0.00
40 - 50	3272 21.3%	3818 24.8%	11556 75.2%	0.00	0.00	0.00
50 - 60	8212 53.4%	12030 78.2%	3344 21.8%	0.00	0.00	0.00
60 - 70	2930 19.1%	14960 97.3%	414 2.7%	0.00	0.00	0.00
70 - 80	357 2.3%	15317 99.6%	57 0.4%	0.00	0.00	0.00
80 - 90	42 0.3%	15359 99.9%	15 0.1%	0.00	0.00	0.00
90 - 100	11 0.1%	15370 100.0%	4 0.0%	0.00	0.00	0.00
100 - 110	4 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
110 - 120	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
120 - 130	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
130 - 140	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
140 - 150	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
150 - 160	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
160 - 170	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
170 - 180	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
180 - 190	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00
190 - 200	0 0.0%	15374 100.0%	0 0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

Limit	Below	Above
0 | 50 (PSL)	3818 24.8%	11556 75.2%