

### **4.3 LOCAL AREA TRAFFIC MANAGEMENT STUDY - BRANDON PARK DRIVE AREA**

(TT: ROADS23)

Responsible Director: Ossie Martinz

#### **EXECUTIVE SUMMARY**

##### ***PURPOSE***

The purpose of this report is to inform Council of the recent Local Area Traffic Management Study (LATM) undertaken in the Brandon Park Drive Area (area bounded by Ferntree Gully Road, Springvale Road, Brandon Park Drive and Lum Road) and to seek Council's endorsement to progress the installation of 17 road humps in numerous street as identified in this report.

##### ***KEY CONSIDERATIONS / ISSUES***

The Ferntree Gully Road / Springvale Road and Wellington Road / Springvale Road intersections have had peak period traffic congestion for a decade and the problems continue to get worse. The main cause is high numbers of motorists travelling westbound in the morning seeking local road alternatives to by-pass these busy intersections.

Following a public meeting, a Steering Committee was established to discuss this issue, review survey information and consider traffic management options. The Steering Committee was made up of six resident representatives, three ward councillors and engineering staff. Seven Steering Committee Meetings were held between May 2018 and May 2019.

Following a community consultation process, the Steering Committee has recommended the installation of 17 flat-topped road humps within Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue.

##### ***FINANCIAL IMPLICATIONS***

The estimated cost for the recommendations of the LATM Study is \$240,000.

This allocation is included in the 2019/20 Engineering Projects Capital Work Budget.

##### ***CONCLUSION***

The LATM Study was a collaborative process which aimed to address concerns about the level of non-local traffic passing through the precinct. The recommended solutions will improve road safety along targeted streets and enhance liveability in the area. The report seeks Council's endorsement to proceed with the installation of road humps as proposed.

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### 4.3 LOCAL AREA TRAFFIC MANAGEMENT STUDY - BRANDON PARK DRIVE AREA

(TT: ROADS23)

Responsible Director: Ossie Martinz

#### **RECOMMENDATION**

*That Council*

- 1. Notes the Local Area Traffic Management Study process undertaken in the area bounded by Ferntree Gully Road, Springvale Road, Brandon Park Drive and Lum Road;*
- 2. Endorses the proposal for the installation of 17 road humps within Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue;*
- 3. Notes the budget allocation of \$240,000 in the 2019/20 draft capital works program for delivery of LATM study;*
- 4. Includes ongoing maintenance costs of \$5,000 per year in Council's annual engineering operating budget commencing 2020/21; and*
- 5. Acknowledges the work of the community members who dedicated time to the Steering Committee and collaborated productively the Local Area Traffic Management study process.*

#### **INTRODUCTION**

The purpose of this report is to inform Council of the recent Local Area Traffic Management Study (LATM) undertaken in the Brandon Park Drive Area (area bounded by Ferntree Gully Road, Springvale Road, Brandon Park Drive and Lum Road) and to seek Council's endorsement to progress the installation of 17 road humps in numerous street as identified in this report.

#### **BACKGROUND**

The Ferntree Gully Road / Springvale Road and Wellington Road / Springvale Road intersections have had peak period traffic congestion for decades and the problems continue to get worse. The main cause is high numbers of motorists travelling westbound in the morning seeking local road alternatives to by-pass these busy intersections. Magid Avenue and Brandon Park Drive are the key streets used by cars to ingress /egress the area.

In 1990, a LATM Study by Council (former City of Waverley) resulted in a number of roundabouts and an internal right turn restriction into Magid Avenue being installed in an effort to better manage traffic. In 1999 discussions were held with residents of Academy and Collegium Avenues about their concerns with traffic volumes and speed in their streets. It was agreed, after considering various options, to install three flat-topped road humps in both streets and this was done in 2000.

**DISCUSSION**

Non-local traffic passing through the area prevails as a consequence of the high traffic volumes on the arterial network.

Origin – Destination surveys for the area have been undertaken in 2004, 2007, 2011 and 2017 for the Thursday 7.30am – 9.30am peak period. Refer to **Attachment A**

In short they identify the following number of vehicle trips within the area:

2 Hours - Thursdays 7.30am – 9.30am				
Year	2004	2007	2011	2017
Total Trips	3633	3860	2440	3731
<i>Through Trips</i>	<i>2011</i>	<i>1737</i>	<i>966</i>	<i>2180</i>

The lower volumes for year 2011 reflect the benefit in the opening of Eastlink in 2008 but over time traffic quantities have returned on the arterial network and so too within this local street system.

To revisit considerations to manage the non-local traffic passing through this area a new LATM Study commenced with a public meeting at the Good Shepherd Parish School on Wednesday 23 May 2018. The meeting was attended by more than 80 residents and all transport matters were open for discussion. A Steering Committee made up of six resident representative, the three ward councillors and engineering staff was formed. Seven meetings followed.

The meetings discussed issues and concerns, referenced survey information, considered the advantages and disadvantages of a variety of options including road closures, one-way traffic flow, turn bans, lower speed limits and road humps. Key considerations were:

- The need to avoid shifting the problem to other streets
- The need to address traffic speed and safety
- The need to keep the task in perspective

Mtg	Date
1	23 May 2018
2	9 July 2018
3	13 August 2018
4	1 October 2018
5	19 November 2018
6	5 March 2019
7	13 May 2019

The Steering Committee agreed that imposing further access restrictions in the precinct would have adverse impacts on residents in the area. Instead the focus of the study was on improving road safety on rat-run streets by constraining traffic speed.

The traffic volumes and speeds along these streets are shown below.

Street Name	Darnley Grove (2018)	Earlwood Drive (2017)	Blackwood Drive (2016)	Academy Avenue (2016)
24 hour volume (veh/day)	1,264	1,465	1,447	1,372
AM Peak Hour (veh/hr)	396	282	482	328
PM Peak Hour (veh/hr)	71	149	79	127
85 <sup>th</sup> Percentile Speed (km/h)*	54	56	54	52

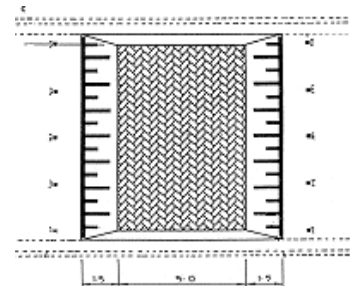
\* *The 85th Percentile Speed is the speed up to which 85% of vehicles travel and is used as an indicator of general traffic speed.*

The Steering Committee developed a solution comprising 17 flat-topped road humps within Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue. Earlwood Drive has a wider road pavement and parking lanes will also be included.

Refer **Attachment B**

To achieve the desired speed between the road humps the number and spacing of these traffic calming measures are important. Council's extensive experience in using road humps has been that a 'flat-top' style spaced typically 100m apart provides the most suitable outcome

This approach encourages motorists to keep a consistent speed, instead of repeated acceleration and braking, which often occurs when the humps are more severe or spaced further apart. This proposal also complements the existing installations in Collegium Avenue and Academy Avenue (west of Strada Crescent)



At the final meeting of the Steering Committee on 13 May 2019, the members agreed that the level of support for the proposal was very strong, particularly from residents/owners of the four streets where road humps will be installed. Residents or owners of properties who did not respond received two requests to do so. It was agreed that a non-reply represented acceptance of the preferred outcome.

### ***SOCIAL IMPLICATIONS***

As the Ryman site development progresses (it provided a newly installed signalised pedestrian crossing across Brandon Park drive between Academy and Collegium Avenues), and as schools in the area grow, the local residential precinct will gradually change to accommodate higher resident numbers. The traffic management proposal is a step towards improving road safety within the area.

### ***HUMAN RIGHTS CONSIDERATIONS***

There are no significant human rights considerations except that the proposal will assist the residents of the area by promoting a safer environment.

### ***CONSULTATION***

The community has had several opportunities to become involved with this LATM Study.

Initially a notice was distributed to all properties within the area (approx. 1,800) inviting residents to a public meeting which was held on 23 May 2018. More than 80 residents attended.

An update notice was distributed in October 2018.

In February 2019 a notice outlining the issues and detailing the proposal for 17 flat-topped road humps was distributed to all properties. A voting slip was attached seeking resident comment and preferences. Refer **Attachment C**

In March 2019 a second notice and voting slip was mailed to those residents of Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue (the streets where the installation of flat-topped road humps was being proposed) who had not returned a completed voting slip.

In April 2019 a notice and voting slip was mailed to the property owners of these streets who do not reside at their property.




A total of 399 responses were received.

The area wide community views for the installation of roads humps in the four streets as proposed are:

	<b>Darnley Gr</b>	<b>Earlwood Dr</b>	<b>Blackwood Dr</b>	<b>Academy Dr</b>
Total Area Responses	397	397	397	397
Agree	243 (61%)	249 (63%)	247 (62%)	243 (61%)
Neutral	69 (17%)	62 (16%)	66 (17%)	60 (15%)
Disagree	85 (21%)	86 (22%)	84 (21%)	94 (24%)

More specifically the responses from residents/owners of the properties of the 4 streets are:

	<b>Darnley Gr</b>	<b>Earlwood Dr</b>	<b>Blackwood Dr</b>	<b>Academy Dr</b>
Total Street Properties	72	52	33	35
Total Street Responses	44 (63%)	32 (62%)	28 (85%)	22 (63%)
Total Agree	35 (80%)	24 (75%)	22 (79%)	19 (86%)
Total Neutral	2 (5%)	2 (6%)	0 (0%)	1 (5%)
Total Disagree	7 (16%)	6 (19%)	6 (21%)	2 (9%)

 % Response for each street;  % Total Agree for each street;  % Total Disagree for each street

These responses are represented on map in **Attachment D**.

Those objecting to the proposal cited possible noise, vehicle wear and tear, the inability of road humps to reduce traffic speed or volumes, the high cost, the inconvenience to residents, and that they did not believe that speed was an issue. On the other hand, many residents believed

that there are significant issues in the area and that road humps are a long overdue traffic management treatment.

The Police and Ambulance services are generally in favour of traffic management in local streets because of the added safety benefits. The roads involved are not collector routes and are not considered to impact Fire Brigade operations.

There is a bus route that travels along Earlwood Drive and Academy Avenue. Both Public Transport Victoria and the bus operator have agreed to the road humps on the understanding that a ramp grade of 1 in 17 is used as is the situation with the existing flat-topped road humps installed in the section of Academy Avenue between Strada Crescent and Brandon Park Drive in 2000.

### ***FINANCIAL IMPLICATIONS***

The estimated cost for the recommendations of the LATM Study is \$240,000.

This allocation is included in the 2019/20 Engineering Projects Capital Work Budget.

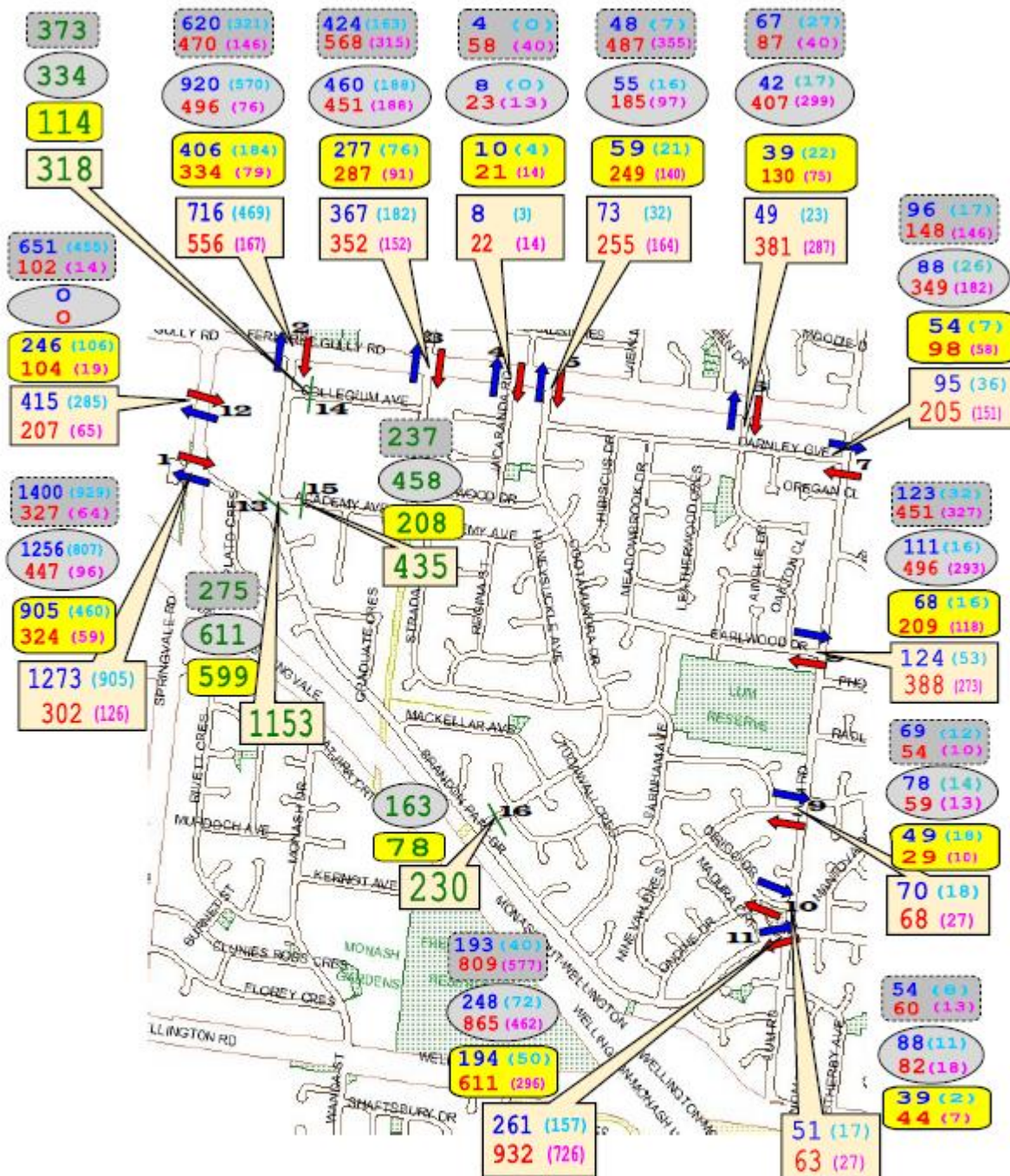
### ***CONCLUSION***

The LATM Study has progressed a collaborative process to address concerns about the level on non-local traffic passing through the precinct by improving road safety along targeted streets to enhance liveability of the area.

The proposal to install 17 flat-topped road humps within Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue has been well received by the community and the LATM Study resident committee seeks Council's endorsement to proceed with installation.

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ATTACHMENT A



### Origin - Destination Surveys, BRANDON PARK 7.30am - 9.30am Thursday

Apr 04	Jun 07	Nov 11	Nov 17
2011	1737	966	2180
3633	3860	2440	3731

#### ← Thru' TOTAL (External In and Out)  
#### ← TOTAL (External In and Out)  
## ← Thru' TOTAL (internal station)

Total OUT → ## (##) ← Thru' OUT  
 Total IN ← ## (##) ← Thru' IN



ATTACHMENT B





**ATTACHMENT C**

# Local Area Traffic Management Program



RM23:D19-31780  
13 February 2019

Dear Resident

I am writing to update you about a Local Area Traffic Management Study Council is undertaking with the input of residents to consider road safety issues in the Wheelers Hill area around Springvale Road, Ferntree Gully Road, Lum Road and Monash Freeway.

The study involved an initial public meeting in May, 2018 and the establishment of a Resident Advisory Committee.

The subsequent meetings we've had with the advisory committee considered a number of options to address the speed and congestion issues in the area including road closures, one-way streets, roundabouts, restrictions on turns and road humps.

Key considerations were:

- Avoiding moving the traffic issues to other streets (the likely result of any road closure or one-way streets)
- Speed and safety
- Sustainable road treatments that don't require additional enforcement (ie from Police)

Many of the issues stem from motorists avoiding the congestion on Ferntree Gully Road and using the local streets as an alternative route. It is considered that reducing the number of motorists using this alternative route would result in a reduction in the congestion issues throughout the entire area.

Reducing the congestion on arterial roads is the responsibility of the State Government and Council continues to advocate for improvements including the extension of Westall Road to Monash Freeway. We are also currently in discussion with VicRoads for changes to signalling at key locations including the Wellington Road and Brandon Park Drive intersection to reduce the number of motorists entering the area in the AM peak period and reduce congestion along Brandon Park Drive and in the overall area.

The traffic volumes and speeds along Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue in Wheelers Hill are outlined in the table below.

Street Name	Darnley Grove (2018)	Earlwood Drive (2017)	Blackwood Drive (2016)	Academy Avenue (2016)
24 hour volume (veh/day)	1,264	1,465	1,447	1,372
AM Peak Hour (veh/hr)	396	282	482	328
PM Peak Hour (veh/hr)	71	149	79	127
85 <sup>th</sup> Percentile Speed (km/h)*	54	56	54	52

\* The 85<sup>th</sup> Percentile Speed is the speed up to which 85% of vehicles travel and is used as an indicator of general traffic speed.

**Language Link Assist**

العربية 9321 5480	Ελληνικά 9321 5482	한국어 9321 5484	русском 9321 5486	<b>Other languages</b> 9321 5488
廣東話 9321 5481	Italiano 9321 5483	普通话 9321 5485	Việt Ngữ 9321 5487	

**The Proposal**

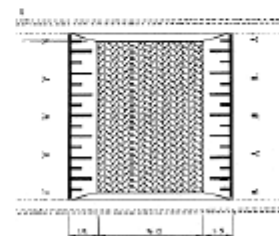
The proposal is for the installation of a series of 'flat-top' style road humps along Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue, as shown on the attached plan. We will seek funding in Council's 2019/2020 budget if residents support the proposal.

The location of property driveways, street lighting and road hump spacing requirements means that there are limited locations where road humps can be installed.

To achieve the desired speed between the road humps the number and spacing of these traffic calming measures are important. Council's extensive experience in using road humps has been that a 'flat-top' style spaced typically 100m apart provides the most suitable outcome (see diagram below).

This approach encourages motorists to keep a consistent speed, instead of repeated acceleration and braking, which often occurs when the humps are more severe or spaced further apart.

In streets with a series of road humps installed with this spacing, the speed between humps has generally reduced to below the 50 km/h speed limit and traffic volumes have also typically decreased.



You can see examples of the proposed style of road hump along Academy Avenue between Brandon Park Drive and Strada Crescent.

**Next Steps – Resident Poll**

We are now seeking feedback from residents on this proposal.

We are aware that not everyone will have the same opinion on this proposal so it's important to us that you have your say for the Resident Advisory Committee and Council to consider the feedback.

The advisory committee is recommending the installation of road humps to control traffic speed and discourage the through traffic using the local streets instead of Ferntree Gully Road.

The road humps would be installed along the streets we know are used by motorists in the morning peak as an alternative to Ferntree Gully Road. We are proposing to install the road humps in multiple local streets because we expect that if one street is treated in isolation, an increase in traffic will occur in surrounding streets.

For further information please phone a members of the Resident Advisory Committee:

- Darren Kohne – 0411 498 950
- Keith Oberin – 0417 311 408
- John Shrives – 0417 591 677
- Lloyd Perrin – 0409 556 588
- Julie Hailey – 0409 013 373
- Mal Baker – 0408 385 554

Alternatively, please phone Rachael McNeil, Sustainable Transport Engineer on 9518 3015 or email [mail@monash.vic.gov.au](mailto:mail@monash.vic.gov.au) preferably before 1 March, 2019.

Yours sincerely

**TONG TE**

Acting Principal Transport Engineer



# VOTING SLIP

## Darnley Grove, Earlwood Drive, Blackwood Drive and Academy Avenue

### Proposal to Install Flat-Top Road Humps

Please let us know your support of the installation of road humps at the locations listed below (tick boxes):

Darnley Grove	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree
Earlwood Drive	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree
Blackwood Drive	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree
Academy Avenue	<input type="checkbox"/> Agree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Disagree

### Further comments:

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Name (required): .....

Address (required): .....

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Please return this form in the pre-paid envelope provided by Friday 1 March 2019.





ATTACHMENT D

