

Our Reference: G21365L-01B

Traffix Group Pty Ltd  
ABN 32 100 481 570

21<sup>st</sup> March 2017

Address  
Suite 8, 431 Burke Road  
Glen Iris Victoria 3146

City of Port Phillip  
Private Bag 3  
ST KILDA VIC 3182

Contact  
Telephone 03 9822 2888  
Facsimile 03 9822 7444  
admin@traffixgroup.com.au  
www.traffixgroup.com.au

Attention: Anthony Trail

Dear Sir,

## **Ferrars Street Education & Community Precinct (FSECP) Traffic Engineering Assessment**

We refer to your request to review the distributed fact sheet for the planned streetscape upgrades and Montague Community Park and also the submission received on behalf of the Surveyors Place Owners Corporation (SPOC), and provide an updated traffic engineering assessment on the two proposals.

Our assessment is set out below.

### **Background**

The Ferrars Street Education & Community Precinct (FSECP) includes five (5) key projects which are proposed to be completed by the start of the 2018 school year, namely:-

- New Primary school with integrated community facilities (Maternal Child Health, Childcare Centre, etc.)
- Open Space Procurement
- Tram Stop Upgrades/Relocation
- Traffic and Pedestrian Signalling
- Public Realm Works (Railway Place, the “Knuckle” – Ferrars Street/Buckhurst Street/Douglas Street)

Research and strategic planning undertaken by the City of Port Phillip (CoPP) and State Government has identified the need for additional public open space within the Montague Precinct and accordingly the public realm works include a number of road closures and partial road closures to facilitate the provision of additional public open space and improvements to the public realm.

Traffix Group was engaged by Council in September 2016 to undertake a car parking assessment and a traffic engineering assessment of the proposed FSECP road closures.

As a result of community feedback, Council resolved in December 2016 to re-scope the streetscape plans and work with the local community to consider measures to address concerns about access to the precinct and on-street parking.

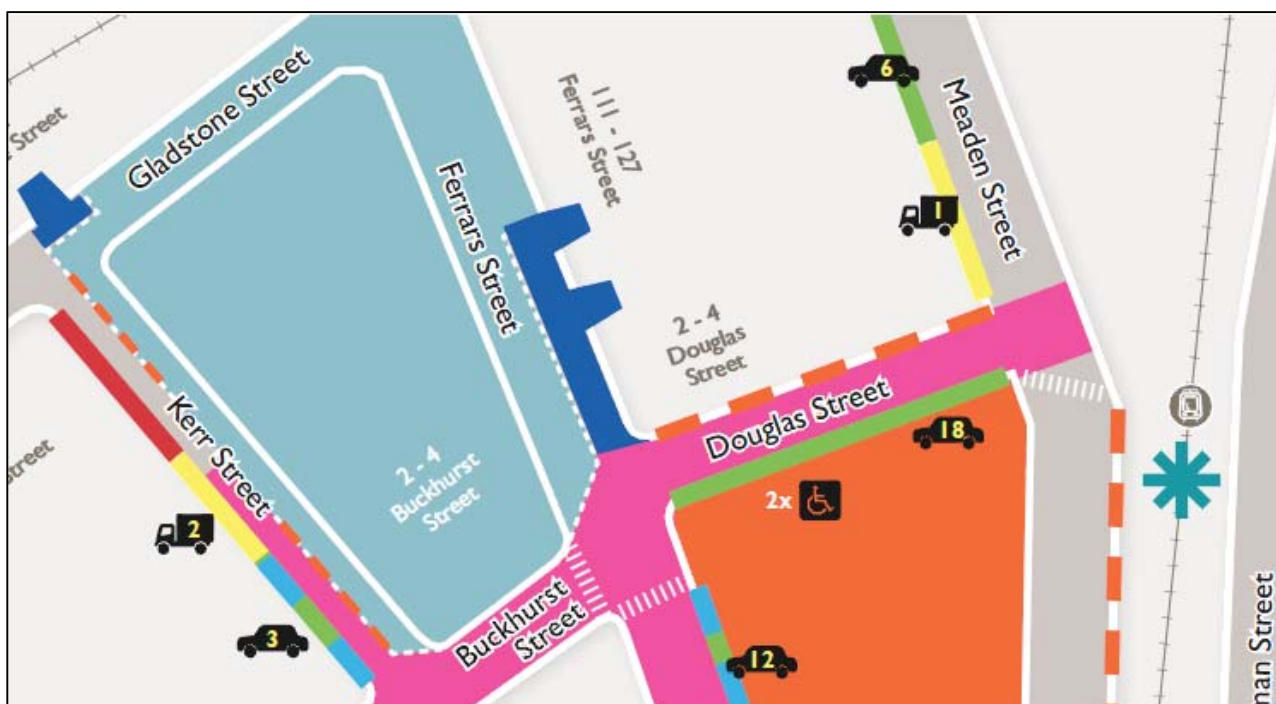
The revised design was circulated to the community via a “Fact Sheet”, which invited comment on the revised streetscape design by 10<sup>th</sup> March 2017.

In response, Council received a submission from Peter Harvey & Co on behalf of the Surveyors Place Owners Corporation (SPOC). The submission was generally supportive of the changes which included retention of more parking within the precinct, however expressed concern with regard to a lack of on-street parking provision for Surveyors Place businesses at the northern end of Ferrars Street. The submission from SPOC also put forward an alternative proposal which included 16 car spaces on Ferrars Street north of Douglas Street, and claimed an encroachment into the planned park area of only 180m<sup>2</sup>. The submission refers to a need for these spaces for workers and visitors to the main Surveyors Place Creative Hub.

A description and assessment of the current (consultation) proposal and the SPOC alternate proposal are discussed below.

### Consultation Proposal

An extract from the current (consultation) proposal showing the Ferrars Street closure north of Douglas Street, property access proposal (dark blue) and nearby car parking, is shown in Figure 1 below. A copy of the full version of this plan is attached at Appendix A.



**Figure 1: Consultation Proposal**

The plan circulated as part of the latest community consultation fact sheet is diagrammatic only. It is not to scale, and doesn’t show details in relation to proposed traffic management of the “knuckle” (being the intersection of Buckhurst Street/Douglas Street/Ferrars Street).

Our understanding is that Council’s intention is that the Buckhurst Street/Ferrars Street (south)/Douglas Street intersection will function as a reverse priority T-intersection, with priority between the Buckhurst Street/Ferrars Street South legs, and with Douglas Street operating as the minor (Give Way) leg. The northern

section of Ferrars Street will not function as a “street” as such, and will have a new access restoration “driveway” along the eastern boundary of the existing Ferrars Street road reservation, to provide access to existing crossovers and off-street car parking on the eastern side of Ferrars Street.

We understand that the design of the driveway within the current Ferrars Street road reservation north of Douglas Street will maximise the land available for the new park by:

- being located close to the eastern boundary of the road reservation (approximately adjacent to the existing eastern kerb line/nature-strip), and
- being single width (nominally 3 metres wide), with passing areas where required and no provision for on-street parking.

### Alternate (SPOC) Proposal

Figure 2 below shows the alternate SPOC proposal, which includes 16 90-degree car spaces on the western side of a reduced Ferrars Street carriageway north of Douglas Street.



Figure 2: Alternate SPOC Proposal

It is noted that the SPOC plan indicates a ... “loss of only 180 sq of Park”. However, 90-degree car spaces are (at a minimum) 2.6 metres wide and 4.8 metres long (plus 600mm overhang over low kerb on the park side), and accordingly 16 spaces would take up 225m<sup>2</sup>.

In addition, 2.6 metre wide car spaces require a minimum 5.4 metre wide manoeuvring aisle space (rounded up to 5.5 metres wide for a two-way access road), resulting in a total paved width of 10.3 metres including the road carriageway and car spaces. This significantly exceeds Council’s proposed 3.0 metre wide carriageway. There would need to be in the order of an additional 104m<sup>2</sup> of paved roadway to provide access to the 90-degree car spaces, taking the total additional land take (lost from the park) to 329m<sup>2</sup>, which is significantly more than the 180m<sup>2</sup> suggested by the SPOC plan.

## Traffic Engineering Assessment

There are approximately 38 off-street car spaces accessed via the northern section of Ferrars Street (north of Douglas Street). These spaces are secure (gated) and appear to be utilised for staff parking for Surveyors Place businesses. As a typical rule-of-thumb, in the order of two-thirds of these car spaces are likely to fill during the AM peak hour, with the reverse occurring during the PM road network peak hour, corresponding to in the order of 25 vehicle movements in the peak hour.

Clause 3.2.2 of the Australian Standard for Off-Street Car Parking AS2890.1-2004 addresses width requirements for low volume access driveways and connecting roadways, and states that ... *“as a guide, 30 or more movements in a peak hour (in and out combined) would usually require provision for two vehicles to pass on the driveway, i.e. a minimum width of 5.5 metres. On long driveways, passing opportunities should be provided at least every 30 metres”*.

Based on the preceding assessments it is anticipated that the two-way traffic volume during the peak hour will be less than 30 movements, and accordingly Council’s proposal to provide access via a single width driveway is considered to be appropriate.

It is noted that the northern-most existing driveway on the east side of Ferrars Street is located approximately 40 metres north of Douglas Street. The provision of one midblock passing area would comply with Clause 3.2.2 of AS2890.1 in terms of the provision of passing opportunities.

If the SPOC proposal were to be constructed (with 16 on-street spaces on the west side of a reduced Ferrars Street carriageway), there would be 54 car spaces accessed via the modified northern section of Ferrars Street. Based on two-thirds of these car spaces filling during the AM peak hour, this corresponds to in the order of 36 vehicle movements in the peak hour, i.e. more than 30 movements. This suggests a two-way design is required having regard to Clause 3.2.2 of AS2890.1, with a minimum carriageway width of 5.5 metres. As previously noted, a 5.5 metre wide access aisle would be required for access to 2.6 metre wide 90-degree spaces anyway, which would also be suitable for simultaneous two-way vehicle access.

The SPOC proposal (which includes provision of 16 car spaces within the northern section of Ferrars Street) would have adverse safety implications for the following reasons:

- it would generate increased vehicle movements compared to the current consultation proposal which does not include any on-street parking in Ferrars Street north of Douglas Street,
- the increased vehicle movements and the need to physically access 90-degree car parking spaces would result in the need to construct a considerably wider carriageway than is contemplated in the current proposal,
- the provision of publicly accessible car spaces within the existing Ferrars Street road reservation to the north of Douglas Street would result in the need to also provide a turning treatment so that vehicles can turn around and exit in a forwards direction if all car spaces are occupied (which would require further land-take from the park),
- the provision of publicly accessible car parking in such close proximity to the school would attract additional traffic during the school pick-up and drop-off period from parents seeking to collect children as close to the school as possible, with a potential for parents to utilise the area to pick-up and drop-off children even if all 16 spaces are occupied (e.g. a 5.5 metre carriageway would allow a vehicle to prop

illegally on one side potentially obstructing vehicle access to the off-street car parks and/or turning manoeuvring to the 16 car spaces),

- the use of this area for picking up and/or dropping off school children would be undesirable from a pedestrian safety perspective,
- the increased carriageway width required to facilitate access to 90-degree car spaces would require a re-design of the “knuckle” intersection which is currently envisaged as a reverse priority T, with priority to Buckhurst Street and Ferrars Street (south), and with Douglas Street forming the minor leg (and Ferrars Street north operating as a minor driveway connection to Douglas Street to the east of the T-intersection), in particular, the higher traffic volume and wider carriageway width would return the intersection configuration to a four-way cross-intersection as per the existing layout, albeit with narrowed approaches, and
- a cross-intersection arrangement would be undesirable for the following reasons:
  - the short term (known) development of the immediate surrounds (including approved Gladstone Street and Buckhurst Street developments as well as the school and park) will result in an increased number of pedestrians crossing between the park, school and the Route 96 tram stop in the vicinity of the Ferrars Street/Buckhurst Street/Douglas Street intersection,
  - as a result of known development in the immediate area likely to occur in the short-term future (including the school opening in 2018 and future upgrades to the Montague Street/Buckhurst Street and Ferrars Street/City Road intersections), there will be an increase in traffic at the “knuckle” intersection, in particular turning from west to south and vice-versa which would have adverse safety implications and increase the probability for vehicle and pedestrian conflicts if retained as a cross-intersection, and
  - retention of the northern leg as a publicly accessible roadway would have adverse safety implications in terms of introducing the potential for school parents to enter and circulate as previously flagged, which would increase the safety risks for pedestrians (including children).

The reverse priority T-intersection as currently proposed by Council better caters for the peak flow direction of traffic and enables a safer crossing environment with a minimised crossing distance for pedestrians. This arrangement will also better serve the longer-term traffic volumes, noting that Buckhurst and Ferrars Streets will operate as the collector roads and primary access routes for the precinct, accommodating the majority of vehicle trips to/from the precinct via the Buckhurst Street/Montague Street and Ferrars Street/City Road signalised intersections.

## **Car Parking Comment**

The SPOC submission indicates that the 16 additional car spaces could be used for workers and visitors to the main Surveyors Place Creative Hub, and suggests that without these spaces the existing businesses at the northern end of Ferrars Street would be unviable and the building un-leasable.

### **Visitor Parking**

The revised (current) Council plan includes 20 visitor parking spaces (including two disabled bays) in Douglas Street and additional short-term parking on Ferrars Street (between Buckhurst Street and Thistlethwaite Street), Kerr Street and Meaden Street. All of these spaces will have short-term restrictions suitable for

visitors, and all are located within 150 metres (about 2.5 minutes) walking distance from the northern-most tenancy in Ferrars Street.

On that basis, we do not agree that there will be a lack of visitor parking after the streetscape works.

### **Staff Parking**

It is noted that the area is covered by a Parking Overlay – Schedule 1, which restricts car parking provision to a maximum of 1 car space per 100m<sup>2</sup> for office use. Typical office employee ratios are up to 5 employees per 100m<sup>2</sup>, suggesting that in this area, it is expected that perhaps 80% of employees will seek alternative sustainable transport means to commute to work (including public transport, walking, cycling, car sharing, etc.).

This parking provision cap has been set having regard to the locality in close proximity to the CBD (and within the Capital City Zone) and relative ease of accessibility via alternative modes (other than car), and also taking into account the existing arterial road network limitations in this area and the need to reduce traffic congestion.

The submission from SPOC indicates that the Surveyors Place “hub” employs in the order of 295 staff within 25+ businesses. At a rate of at least 80% travelling via alternative means (as per the parking policy for this area) there would be a need for in the order of 59 staff car spaces. There are in the order of 64 spaces on-site, including 38 accessed via Ferrars Street and 26 accessed via Meaden Street. This is in line with (or in excess of) the current parking provision limits for this area as per the Parking Overlay rates.

The Surveyors Place precinct is located approximately 20 minutes walking distance from Southern Cross Railway Station in the CBD, and is also connected via the 96 and 109 tram routes, with tram stop upgrades currently underway, making it ideally located to support staff travelling to the area via sustainable modes.

Historically, being an old industrial precinct with wide roads and ample publicly available on-street car parking, staff have typically driven to the area due to the convenience. However this abundance of publicly available all-day parking will no longer continue to be provided, and staff will need to change their travel behaviours accordingly.

It is not considered that this would make the tenancies un-leasable as suggested by the SPOC submission. From a traffic engineering perspective, after the streetscape works the site will be well catered for being close to the CBD with the ease of access via alternative modes, and the retention of on-site employee parking and short-term on-street parking options nearby for visitors.

### **Access within Park Comment**

The SPOC submission refers to the need for trafficable surfaces within the park to the northern end of Ferrars Street to allow for emergency services vehicles, couriers and pedestrians, and seeks to have the current plan amended to include reference to this.

While we understand that the current plans will maintain the existing footpath for pedestrian access to the front door of the existing businesses at the northern end of Ferrars Street and provide a “green trafficable surface” for emergency access to the northern end of Ferrars Street (allowing MFB access to the SPOC fire pump room), we do not agree that there is a necessity to allow front door vehicular access for couriers.



We consider that the location of the proposed loading zones on Kerr Street and Meaden Street is proximate enough for courier use. Additionally small courier vans can also utilise the proposed short-term parking spaces in the surrounding streets.

Please contact Henry Turnbull or Jodie Place at Traffix Group if you require any further information.

Yours faithfully,

TRAFFIX GROUP PTY LTD

A handwritten signature in blue ink that reads "Henry H Turnbull". The signature is written in a cursive style with a large initial "H".

HENRY H TURNBULL



# Appendix A Consultation Plan



# Ferrars Street Education and Community Precinct



## Proposed changes to local streets and parking

