

WAVERLEY TRAFFIC COMMITTEE MEETING

A meeting of the WAVERLEY TRAFFIC COMMITTEE will be held by video conference at:

10.00 AM, THURSDAY 25 JUNE 2020

Nikolaos Zervos

Acting Executive Manager, Infrastructure Services

Waverley Council PO Box 9 Bondi Junction NSW 1355 DX 12006 Bondi Junction Tel. 9083 8000

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AGENDA

Apologies

Declarations of Interests

The recommendations contained in Part 1 - Matters Proposing That Council Execise Its Delegated Functions - of the Minutes of the Waverley Traffic Committee meeting held on 28 May 2020 were adopted by Council at its meeting on 16 June 2020 with the following changes:

1. TC/C.01/20.05 – 40 km/hr Speed Limit Changes – Traffic Control Devices

Council did not adopt the recommendation of the Traffic Committee, and made the following decision:

'That:

- 1. Council defers this item to a Councillor workshop for further consideration of the location and type of traffic calming devices in the locations of:
 - (a) Bourke Street, Queens Park.
 - (b) Botany Street, Bondi Junction.
 - (c) Park Parade, Bondi.
 - (d) Bennett Street, Bondi.
 - (e) Ruthven Street, Bondi Junction.
- 2. A report comes back to Council.'
- 2. TC/V.04/20.05 Barracluff Avenue, Bondi Beach Traffic Assessment

Council adopted the recommendation of the Traffic Committee, subject to being amended to read as follows:

'That Council further develops design options for Barracluff Avenue and undertakes community consultation with the residents of Barracluff Avenue and adjoining streets on the following two scenarios:

1. Construction of pedestrian/traffic islands with associated line marking and signage at the intersections of Barracluff Avenue and Francis Street, and Barracluff Avenue and Lamrock Avenue, Bondi Beach, as shown in Drawing 9005 Issue A attached to this report.

Including the installation of kerb extensions in Barracluff Avenue on both sides of the road opposite:

- (a) 23 Barracluff Avenue and 25 Barracluff Avenue.
- (b) 5 Barracluff Avenue and 7 Barracluff Avenue.
- 2. Construction of a road closure of Barracluff Avenue in the vicinity of 21 Barracluff Avenue.

PART 1 – MATTERS PROPOSING THAT COUNCIL EXERCISE ITS DELEGATED FUNCTIONS

NOTE: The matters listed under this part of the agenda propose that Council either does or does not exercise the traffic related functions delegated to it by TfNSW. The recommendations made by the Committee under this part of the agenda will be submitted to Council for adoption.

TC/C STATE ELECTORATE OF COOGEE

TC/C.01/20.06 8 Brisbane Street, Bondi Junction - Construction Zone (A03/2514-04)...... 17

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9 metre long "No Parking 7 am 5 pm Mon Fri, 8 am 3 pm Saturday Council Authorised Vehicles" zone in Brisbane Street, Bondi Junction fronting properties 8, 10 and 12.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

COUNCIL OFFICER'S PROPOSAL:

That Council:

- Approves the temporary half road closure of Macpherson Street, Bronte, between Pembroke Street and just east of Tipper Avenue over two days during a working week (10.00 pm on Day 1 to 11:30 pm on Day 2) on dates to be agreed with Council in accordance with the Install Management Plan attached to this report, subject to the Applicant:
 - (a) Notifying NSW Police and Transport for NSW and obtaining relevant approvals.
 - (b) Obtaining relevant approvals from the National Heavy Vehicle Regulator.
 - (c) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
 - (d) Notifying local residents and businesses around 5 working days prior to the event with a follow up notification on the day prior to Day 1 of the closure.

- (e) Obtaining approval of any tree pruning from Council's tree management team.
- (f) The applicant liaising with and assisting affected residents and other people during the two days of operation.
- (g) Using RMS-accredited traffic controllers.
- (h) Covering all costs associated with closing the road, including traffic control.
- (i) Completing all work except removal of the crane by 11.30 pm on Day 2 when full access to Macpherson Street and residences will be restored.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services to approve the dates that the operation will occur.
- 3. Requires a Council compliance officer to be on-site for the duration of the works at the Applicant's expense, and that this be communicated to the Applicant.

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/20.06 48-50 Penkivil Street, Bondi - Construction Zone (A03/2514-04)...... 54

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 16 metre long "No Parking 7 am 5 pm Mon Fri, 8 am 3 pm Saturday Council Authorised Vehicles" zone outside frontage of No. 48-50 Penkivil Street, Bondi.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

TC/V.02/20.06 376 Military Road, Vaucluse - Construction Zone (A03/2514-04) 57

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9 metre long "No Parking 7 am 5 pm Mon Fri, 8 am 3 pm Saturday Council Authorised Vehicles" zone in front of No. 376 Military Road, Vaucluse.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

TC/V.03/20.06 62 Gilgandra Road, North Bondi- Construction Zone (A03/2514-04)...... 61

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9 metre long "No Parking 7 am 5 pm Mon Fri, 8 am 3 pm Saturday Council Authorised Vehicles" zone in front of No. 62 Gilgandra Road, North Bondi.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

TC/CV <u>ELECTORATES OF COOGEE AND VAUCLUSE</u>

Nil

PART 2 – TRAFFIC ENGINEERING ADVICE

NOTE: The matters listed under this part of the agenda seek the advice of the WTC only and do not propose that Council exercise its delegated functions at this point in time (though they may or may not require it in the future).

TC/TEAC STATE ELECTORATE OF COOGEE

Nil

TC/TEAV STATE ELECTORATE OF VAUCLUSE

Nil

TC/TEACV <u>ELECTORATES OF COOGEE AND VAUCLUSE</u>

Nil

MINUTES OF THE WAVERLEY TRAFFIC COMMITTEE MEETING HELD BY EMAIL ON THURSDAY, 28 MAY 2020



Voting Members Present:

Cr P Masselos Waverley Council – Chair

Sgt L Barrett NSW Police – Eastern Suburbs Police Area Command – Traffic Services

Mr M Carruthers Transport for NSW – Network and Safety Officer

Mr P Pearce Representing Marjorie O'Neill, MP, Member for Coogee Ms J Zin Representing Gabrielle Upton, MP, Member for Vaucluse

Also Present:

Cr T Kay Waverley Council – Alternate Chair

Mr B Gidies State Transit – Traffic and Services Manager (Eastern Region)

Mr N Zervos Waverley Council – Acting Executive Manager, Infrastructure Services

This meeting was held by email between 28 May 2020 and 1 June 2020, in accordance with clause 5.4 of the Waverley Traffic Committee Charter.

Apologies

There were no apologies.

Declarations of Pecuniary and Non-Pecuniary Interests

The Chair called for declarations of interest and none were received.

Adoption of Previous Minutes by Council - 23 April 2020

The recommendations contained in Part 1 – Matters Proposing that Council Exercise Its Delegated Functions – of the minutes of the Waverley Traffic Committee meeting held on 23 April 2020 were adopted by Council at its meeting on 5 May 2020.

PART 1 – MATTERS PROPOSING THAT COUNCIL EXERCISE ITS DELEGATED FUNCTIONS

NOTE: The matters listed under this part of the agenda propose that Council either does or does not exercise the traffic related functions delegated to it by TfNSW. The recommendations made by the Committee under this part of the agenda will be submitted to Council for adoption.

TC/C STATE ELECTORATE OF COOGEE

TC/C.01/20.05 40 km/hr Speed Limit Changes - Traffic Control Devices (A18/0579)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Approves the attached designs of six speed humps for construction at:
 - (a) 13 Bourke Street, Bondi Junction.
 - (b) 14 Botany Street, Bondi Junction.
 - (c) 19 Park Parade, Bondi.
 - (d) 27 Bennett Street, Bondi Junction.
 - (e) 91 Ruthven Street, Bondi Junction.
 - (f) Botany Street at Allens Parade, Bondi Junction
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

The Committee noted the following typographical error in the officer's report:

Text in Executive summary (page 12) has a typographical error. The height of the speed hump in Bennett Street should be 75 mm and not 100 mm.

TC/C.02/20.05 Ocean Street (South)/Birrell Street, Bondi - Kerb Buildout (A20/0069)

COUNCIL OFFICER'S PROPOSAL:

That Council approves the installation of a kerb buildout on both sides of Ocean Street, planting within the buildout, and kerb ramps aligned for direct access across Ocean Street at the intersection with Birrell Street, as per Drawing 9004 Issue A attached to this report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted subject to the addition of new clause and amendments to the original clause such that recommendation now reads as follows:

That Council approves the installation of a kerb buildout on both sides of Ocean Street, planting within the buildout, and kerb ramps aligned for direct access across Ocean Street at the intersection with Birrell Street, as per Drawing 9004 Issue A attached to this report, with the No Stopping sign on Birrell Street to the east of Ocean Street to be located 10 ms from the new kerb build out, and subject to outcomes of the following further investigation:

1. That Council officers investigate aligning the proposed kerb buildout and ramps on both sides of Ocean Street closer to the swept paths shown on page 56 of the WTC agenda to provide enhanced pedestrian safety when crossing Ocean Street, and that the Executive Manager Infrastructure Services be granted delegation to amend the drawings, as appropriate.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/C.03/20.05 York Road improvements - Moriah College (A20/0069)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Provides in-principle support to the following upgrade options as part of the proposed development of Moriah College (subject to detailed design):
 - (a) Seagull intersection treatment at York Road-and Queens Park Road.
 - (b) Introduction of a left-turn slip lane on York Road (west) at York Road-and Baronga Avenue.
 - (c) Upgrade of the existing pedestrian refuge on York Road just south of Queens Park Road to a formal pedestrian crossing.
- 2. Detailed designs being submitted to Council's Traffic Committee.
- 3. Advise that all costs associated with the design and construction of the road upgrades are to be borne by the applicant.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted subject to the addition of a new clause after clause 1 and an amendment to clause 1(c), such that the recommendation now reads as follows:

That Council:

- 1. Provides in-principle support to the following upgrade options as part of the proposed development of Moriah College (subject to detailed design):
 - (a) Seagull intersection treatment at York Road-and Queens Park Road.
 - (b) Introduction of a left-turn slip lane on York Road (west) at York Road-and Baronga Avenue.
 - (c) Upgrade of the existing pedestrian refuge on York Road just south of Queens Park Road to a formal raised pedestrian crossing.
- 2. Undertakes a safety assessment of the line-marking for the left and right turns into York Road on the Queens Park Road approach to York Road.
- 3. Detailed designs being submitted to Council's Traffic Committee.
- 4. Advise that all costs associated with the design and construction of the road upgrades are to be borne by the applicant.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/20.05 Murriverie Road, North Bondi - 15 Minute Parking Restrictions (A02/0637)

COUNCIL OFFICER'S PROPOSAL:

That Council installs a 5.5 metre '1/4 P 9.30 am–8 pm Mon–Fri, 8.30 am–12.30 pm Sat' zone from the No Stopping sign on Murriverie Road at Mitchell Street to the west as shown in Figure 3 in this report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.02/20.05 58 Military Road, Dover Heights - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 15 metre long 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' zone in front of 58 Military Road, Dover Heights.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and

duration of, or remove, the construction zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.03/20.05 80 O'Brien Street, Bondi Beach - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 12 metre long 'No Parking 7 am— 5 pm Mon—Fri, 8 am—3 pm Saturday Council Authorised Vehicles' zone in front of 80 and 82 O'Brien Street, Bondi Beach fronting both properties.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.04/20.05 Barracluff Avenue, Bondi Beach - Traffic Assessment (A03/0042-04)

COUNCIL OFFICER'S PROPOSAL:

That Council prepares a preferred option and alternatives for community consultation that include:

- 1. Preferred option:
 - (a) Construction of pedestrian/traffic islands with associated line marking and signage at the intersections of Barracluff Avenue and Francis Street, and Barracluff Avenue and Lamrock Avenue, Bondi Beach, as shown in Drawing 9005 Issue A attached to this report.
 - (b) Kerb extensions in Barracluff Avenue on both sides of the road opposite:
 - (i) 23 Barracluff Avenue and 25 Barracluff Avenue.
 - (ii) 5 Barracluff Avenue and 7 Barracluff Avenue.
- 2. Alternative option: closure of Barracluff Avenue in the vicinity of 21 Barracluff Avenue.

WTC RECOMMENDATION (MAJORITY SUPPORT):

That the Council Officer's Proposal be adopted subject to being amended to read as follows:

That Council:

- For the purpose of community consultation, prepares designs for construction of pedestrian/traffic
 islands with associated line marking and signage at the intersections of Barracluff Avenue and
 Francis Street, and Barracluff Avenue and Lamrock Avenue, Bondi Beach, as shown in Drawing 9005
 Issue A attached to this report.
- 2. Notes that the design includes kerb extensions in Barracluff Avenue on both sides of the road opposite:
 - (a) 23 Barracluff Avenue and 25 Barracluff Avenue.
 - (b) 5 Barracluff Avenue and 7 Barracluff Avenue.

The Waverley Council representative (Chair) voted against the recommendation.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.05/20.05 Rickard Avenue, Bondi Beach - Closure at Lamrock Avenue (A20/0069)

COUNCIL OFFICER'S PROPOSAL:

That Council makes the temporary closure of Rickard Avenue permanent given that it has no adverse traffic related impact on surrounding streets.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.06/20.05 Rose Bay Secondary College - Temporary Drop off/pick up zones following Relaxation of COVID-19 Restrictions (A14/0145)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 20 metre 'No Parking, 8 AM–9 AM, 2:30 PM–4:00 PM, School Days Only' on the eastern side of Hardy Street zone north of the No Stopping Zone on the approach to the marked pedestrian crossing as shown in Figure 4.
- 2. Extends the existing 14.5 metres of 'No Parking, 8 AM–9 AM, 2:30 PM–4:00 PM, School Days Only' on the western side of Hardy Street by an additional 25 metres to the south as shown in Figure 4.
- 3. Converts 21 metres of the 94 metre 'Bus zone, 8 AM- 9 AM, 2:30 PM-4:00 PM, School Days Only'

bus zone to no parking.

- 4. Notifies the immediately affected residents and the school of the changes.
- 5. Delegates authority to the Executive Manager, Creating Waverley, to adjust the length and duration of, or remove the No Parking restrictions, as necessary.
- 6. Requires Council officers to complete a review of the operation of the parking 3 months after implementation and prepare a report for the traffic committee reviewing the status of the parking demand at that time and advise whether some or all of the addition 'No Parking' should be removed.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted subject to clauses 3, 4, 5 and 6 being amended such that the recommendation now reads as follows:

That Council:

- 1. Installs a 20 metre 'No Parking, 8 AM–9 AM, 2:30 PM–4:00 PM, School Days Only' on the eastern side of Hardy Street zone north of the No Stopping Zone on the approach to the marked pedestrian crossing as shown in Figure 4.
- 2. Extends the existing 14.5 metres of 'No Parking, 8 AM–9 AM, 2:30 PM–4:00PM, School Days Only' on the western side of Hardy Street by an additional 25 metres to the south as shown in Figure 4.
- 3. Converts 21 metres of the 94 metre 'Bus zone, 8 AM–9 AM, 2:30 PM–4:00 PM, School Days Only' bus zone to 'No Parking, 8 AM–9 AM, 2:30 PM–4:00 PM, School Days Only'.
- 4. Notifies the immediately affected residents and the school of the temporary changes.
- 5. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove the additional No Parking restrictions, and reinstate current restrictions, as necessary.
- 6. Requires Council Officers to complete a review of the operation of the parking 3 months after implementation and prepare a report for the traffic committee reviewing the status of the parking demand at that time and advise whether some or all of the additional 'No Parking' should be removed, and current restrictions reinstated.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.07/20.05 Curlewis Street Popup Cycleway Concept (SF20/3091)

COUNCIL OFFICER'S PROPOSAL:

That Council:

 Approves in-principle the concept design for a fully separated popup cycleway along Curlewis Street between Campbell Parade and Old South Head Road as documented in Attachment 1 (Curlewis Street Popup Cycleway for May TC), consisting of:

- (a) A bi-directional separated popup bike lane on the southern side of Curlewis Street between Campbell Parade and Gould Street.
- (b) A one-way pair of separated popup bike lanes on each side of Curlewis Street between Gould Street and Wellington Street.
- (c) A painted bike crossing extension to the wombat crossing near Gould Street to connect the northern one-way bike lane in item 2 to item 1.
- (d) A one-way separated popup bike lane on the southern side of Curlewis Street between Wellington Street and Simpson Street.
- (e) Upgrade of existing shared path on the southern side of Curlewis Street between Wellington Street and Old South Head Road.
- (f) A one-way separated popup bike lane on the northern side of Blair Street between Old South Head Road and Simpson Street.
- (g) A new shared path on the northern side of Curlews Street between Simpson Street and Wellington Street.
- (h) Directional signage and new bike path to connect item 6 to item 7.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.
- 3. Requires detailed plans showing modifications to signs and line-markings and any changes to infrastructure to be submitted to Council's Traffic Committee for review following confirmation of funding.
- 4. Requires Council Officers undertake community consultation as part of the detailed design process.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted subject to being amended to read as follows:

That Council:

- 1. Approves in-principle the concept design for a fully separated popup cycleway along Curlewis Street between Campbell Parade and Old South Head Road as documented in Attachment 1 (Curlewis Street Popup Cycleway), for the purpose of:
 - (a) Applying for funding.
 - (b) Undertaking site survey and commencing detail design.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.
- 3. Following confirmation of funding:
 - (a) Requires detailed plans to be prepared showing modification to signs and line-markings and any changes to infrastructure to be submitted to Council's Traffic Committee for review.

(b) Requires Council Officers undertake community consultation as part of the detailed design process.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/CV <u>ELECTORATES OF COOGEE AND VAUCLUSE</u>

Nil.

PART 2 – TRAFFIC ENGINEERING ADVICE

NOTE: The matters listed under this part of the agenda seek the advice of the WTC only and do not propose that Council exercise its delegated functions at this point in time (though they may or may not require it in the future).

TC/TEAC	STATE ELECTORATE OF COOGEE	
Nil.		
	STATE ELECTORATE OF VAUCLUSE	
Nil.		
TC/TEACV	ELECTORATES OF COOGEE AND VAU	<u>CLUSE</u>
Nil.		
THE MEETIN	IG ENDED ON 1 JUNE 2020.	
		SIGNED AND CONFIRMED
		MAYOR L6 JUNE 2020

WAVERLEY

REPORT TC/C.01/20.06

Subject: 8 Brisbane Street, Bondi Junction - Construction Zone

TRIM No: A03/2514-04

Author: Hamoon Bahari, Professional Engineer, Traffic and Transport

Calum Hutcheson, Service Manager, Traffic and Transport

Director: Nikolaos Zervos, Acting Executive Manager, Infrastructure Services

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9 metre long "No Parking 7 am 5 pm Mon Fri, 8 am 3 pm Saturday Council Authorised Vehicles" zone in Brisbane Street, Bondi Junction fronting properties 8, 10 and 12.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

1. Executive Summary

Council has received an application from the builder/developer at 8 Brisbane Street, Bondi Junction for the installation of a 9 metre construction zone fronting properties No.8, No.10 and No.12. Council will need to exercise its delegated functions to implement the proposal.



Figure 1: Aerial image of 8 Brisbane Street, Bondi Junction

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking Council Authorised Vehicles Excepted Excludes Public Holidays' for the approved construction hours under the development consent. Council will then supply applicants with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage with a minimum period of 13 weeks.

Neighbouring properties affected by the Construction Zone (properties No.6, No. 10 and No.12)

The construction zone will be located between two trees - one halfway in front of No.8 and the other at the boundary of No.12/14. Each residence has a 5 metre frontage to Brisbane Street.

Neighbours of No.8 (No.6, No.10 and No. 12) have been consulted by the developer/applicant regarding the location of the Construction Zone. They have indicated no objections to the proposal.



Figure 2: Construction zone frontage



Figure 3: Construction zone frontage 3. Technical Analysis

The applicant has applied for a 9 metre construction zone fronting properties No.8 and No.10 and No.12 Brisbane Street, Bondi Junction.

Table 1. Application details.

ditions including first floor addition and ground existing terrace.
ay – Friday; 8 am – 3 pm Saturday
es each for No.8, No. 10, and No. 12.
P 3pm – 8pm, Permit Holders Excepted, Area 22
two trees – one halfway in front of No.8 and at ry of No.12/14)
September 2020
rking restrictions

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2019/20 financial year are:

- \$66.60 per metre per week in a Residential Development Area.
- \$92.20 per metre per week in a Commercial and mixed-use Development Area.
- \$370 per metred (ticket) car parking space per week in addition to above fees (where applicable).

5. Attachments

Nil .

REPORT TC/C.02/20.06

Subject: 175 Macpherson Street, Bronte - Temporary Half Road

Closure for Crane Lift

TRIM No: DA-201/2016

Author: Calum Hutcheson, Service Manager, Traffic and Transport

Director: Nikolaos Zervos, Acting Executive Manager, Infrastructure Services



COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Approves the temporary half road closure of Macpherson Street, Bronte, between Pembroke Street and just east of Tipper Avenue over two days during a working week (10.00 pm on Day 1 to 11:30 pm on Day 2) on dates to be agreed with Council in accordance with the Install Management Plan attached to this report, subject to the Applicant:
 - (a) Notifying NSW Police and Transport for NSW and obtaining relevant approvals.
 - (b) Obtaining relevant approvals from the National Heavy Vehicle Regulator.
 - (c) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
 - (d) Notifying local residents and businesses around 5 working days prior to the event with a follow up notification on the day prior to Day 1 of the closure.
 - (e) Obtaining approval of any tree pruning from Council's tree management team.
 - (f) The applicant liaising with and assisting affected residents and other people during the two days of operation.
 - (g) Using RMS-accredited traffic controllers.
 - (h) Covering all costs associated with closing the road, including traffic control.
 - (i) Completing all work except removal of the crane by 11.30 pm on Day 2 when full access to Macpherson Street and residences will be restored.
- 2. Delegate's authority to the Executive Manager, Infrastructure Services to approve the dates that the operation will occur.
- 3. Requires a Council compliance officer to be on-site for the duration of the works at the Applicant's expense, and that this be communicated to the Applicant.

1. Executive Summary

Council has received an application from Prebuilt Pty Ltd requesting the temporary half road closure of Macpherson Street, Bronte in the vicinity of No. 175 Macpherson Street in order to deliver and install 9 components of a modular home.

A copy of the Install Management Plan submitted by the applicant for the half road closure and other aspects of the construction is attached.

The works will occur over three days with Day 3 being removal of a crane from the parking lane on Macpherson Street (no road closure required). The proposed half road closure will occur from 10.00 pm on Day 1 until 11.30 pm on Day 2.

The applicant has nominated a Wednesday for Day 2 of the operation. Actual days and dates are to be approved by Executive Manager, Infrastructure Services.

An application for approval of the approach and departure route for the 9 laden articulated trailers has been submitted to the National Heavy Vehicle Regulator (NHVR Consent Request - 349580r1v1).

Council assessment of likely delays indicates 95%ile queues of around:

- 1. 140 metres or 18 vehicles over the day during general conditions.
- 2. 255 metres or 33 vehicles when truck are manoeuvring to and from the crane (9 times over the day)

The estimates of queues arising from truck manoeuvres would extend back past Yanko Avenue for eastbound traffic and back past Pacific Street for westbound vehicles. It should be noted that the queue estimates are vehicle flows during the morning and evening peak periods. Queues at other times would be substantially less.

Restrictions to on-street parking on Macpherson Street between Pembroke Street and Tipper Avenue will have a major impact on residents during the operation.

Council approval is required for the use of local roads including Macpherson Street and surrounding roads.

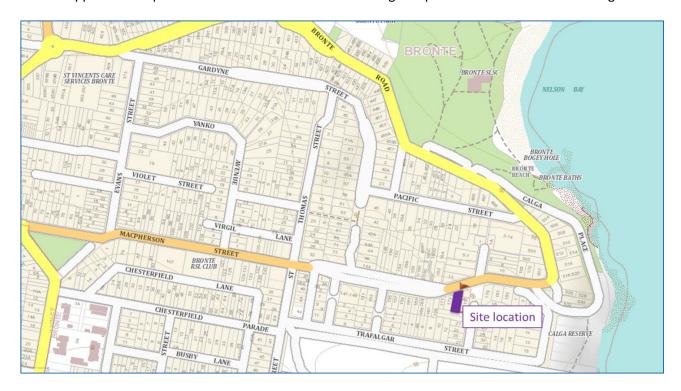


Figure 1.1: Site location

2. Introduction/Background

2.1 The development

The development at 175 Macpherson Street involves the demolition of an existing dwelling (completed) and construction of a dual occupancy (attached) development including basement parking (development application DA-201/2016).

The proposed dwelling is a prefabricated building constructed off-site. The dwelling comprises 9 welded steel modules. Each module will be independent when fabricated off-site and transported individually. The modules will be welded and bolted together on site to form the overall frame.

2.2 Resident consultation and notification

2.2.1 Letterbox Drop

At the time of writing this report, the applicant is in the process of consulting residents in relation to the proposed road closure. Feedback from the consultation will be tabled at the June 2020 Traffic Committee meeting.

The consultation area specified by Council is shown in **Figure 2.1**. A copy of the consultation letter delivered by the applicant to residents is attached. It was distributed by letterbox drop on Wednesday 17 June 2020.

Subject to approval, the applicant will be required to notify residents one week and one day prior to the half road closure occurring. A contact person will be available throughout the duration of the works.



Figure 2.1: Resident consultation area specified by Council

2.2.2 Variable Message Sign VMS Boards

Electronic VMS boards will be placed on the four approaches to the site shown below:

- 1. Macpherson Street, west of St Thomas Street.
- 2. St Thomas Street, north of Macpherson Street.
- 3. St Thomas Street, south of Macpherson Street.
- 4. Bronte Road, north of Pacific Street.

The VMS boards will give advance notice 1 or more days prior that the half road closure. They will also be used to recommend alternative routes during the day of the closure.

2.3 Bus stop relocation

Relocation of a bus stop outside No. 175 Macpherson Street to the east of Tipper Avenue is proposed.

It is noted that this bus stop has already been temporarily relocated east of its original position on Macpherson Street to accommodate a Construction Zone associated with the development. The new location for Day 2 of the operations will be further east.

State Transit has advised that impacts on bus services during weekdays will adversely impact the operation of the 379 service. This service operates at 5 to 10 minute intervals on weekdays and weekend days.

The traffic control contractor, Traffic Logistics, has advised that buses will be given priority by traffic controllers where possible to reduce potential for delays to bus services.

The following procedure is to be applied to minimise disruption of buses:

- 1. Traffic controllers are to allow approximately 30 seconds between directional flow changes except for nine periods during the day when a trucks is accessing the crane. This crane access is expected to require closure of the road for around 3 minutes each time.
- 2. If a bus is approaching from the direction that is currently permitted to flow, the traffic controllers are to allow that bus through before stopping traffic from that approach.
- 3. If a bus is queued on the approach that is currently stopped, the traffic controllers are to switch the direction of flow sooner under their own discretion.

3. Technical Analysis

3.1 Schedule of operations

Traffic control plans for the proposed operations are contained in the attached Install Management Plan. The trucks will deliver the modules from a site in Victoria.

Nine trucks will access the site during the delivery. Lengths of the trucks including the module load are presented in **Table 3.1**. The lengths are for the inbound truck movements. Outbound trucks minus the modules are 19 metres in length.

Inbound trucks are subject to over-size restrictions limiting to operation within the Sydney metropolitan area to night time operations. These trucks must be at the delivery point (Macpherson Street) by 5.00 am.

Outbound trucks are not subject to time restrictions.

Table 3.1: Schedule of trucks delivering housing modules.

Truck (19 metres long)	Module				Truck +
		Length (m)	Width (m)	Height (m)	length (m)
Truck 1 (lift 1)	Mod 3	10.6	2.5	3.4	19
Truck 2 (lift 2)	Mod 2	14.6	4.3	3.4	23
Truck 3 (lift 3)	Mod 1	14.6	4.1	3.4	23
Truck 4 (lift 4)	Mod 7	15.6	4.1	3.5	24
Truck 5 (lift 5)	Mod 6	14.8	4.2	3.5	23
Truck 6 (lift 6)	Mod 5	14.8	4	3.5	23
Truck 7 (lift 7)	Mod 4	8.4	2.9	3.5	19
Truck 8 (lift 8)	Mod 8	12.1	4	3.8	20
Truck 9 (lift 9)	Mod 9	12.1	2.2	3.8	20

Key activities during the operation are:

1. Day 1 (pre-installation):

- (a) 6:00 am Traffic management commencing work.
- (b) Commence parking prevention on two sides of Macpherson Street, starting from Pembroke Street up to No. 183 Macpherson Street.
- (c) 10:00 pm onward Partial road closure commence along Macpherson Street starting from Pembroke St. intersection up to no. 183 Macpherson Street.

2. Day 2 (day of install:

- (a) 2:30 to 5.00 am Trucks with modules arrive on site and park along Macpherson Street in single file.
- (b) 5:00 am to 5:30 am 5 x semi-trailer with crane counterweights arrive, and the mobile crane arrives onsite.
- (c) 5:30 am to 07:30 am Crane set up. Counterweights offload to crane and semi-trailer leave the site. Trucks with modules park along Macpherson road and reposition ready for lifting.
- (d) 07:30 am to 09:30 pm Lift 9 no. modules into position. Unloaded trucks leave the site.
- (e) 09:30 pm to 11:30 pm Contractors pack up and leave the site. Crane counterweights offload to semi-trailers and leave the site. Crane will be parked on the side of Macpherson Road overnight. On street parking will be restored as the trucks leave the area.

3. Day 3 (crane removal):

(a) Crane will leave the site.

The applicant has nominated a Wednesday for the Day 2 operation. Actual days and dates are to be approved by Executive Manager, Infrastructure Services.

Day 1 or 2 operations will not be permitted on a Friday as this is waste collection day. Further details are contained in the attached Install Management Plan.

3.3 Pedestrians and driveway access

The applicant will have on site traffic controllers to ensure safe passage of pedestrians and cars to and from individual houses.

3.3 Traffic delays

Traffic delays have been assessed by McLaren Traffic Engineering. A copy of the report is included in the attached Install Management Plan.

McLaren Traffic Engineering have advised:

- 1. General conditions The partial lane closure will result in minor delays during the peak hour, with lesser delays to occur during shoulder and off-peak hours. Average queues are queues are predicted to be approximately 38 metres. 95%ile queues are predicted to be approximately 65 metres or less during the duration of the partial road closure. Queues will be slightly longer than 65 metres for 5% of the times that vehicles are stopped.
- 2. Truck manoeuvres The movement of laden and unladen vehicles into and out of the works zone will require that all vehicles are stopped in both directions temporarily for approximately three minutes nine times during Day 2. Average queuing at these times are reported by McLaren Traffic Engineering to be around 61 metres.

The analysis by McLaren Traffic Engineering is not accepted by Council officers. This is primarily because it assumes that traffic from either direction is given 22 to 23 seconds of" green time" for each cycle of the stop/go operation (the time that the go side of the sign is displayed by the traffic controller). This should be longer.

Council officers have extrapolated the queues estimated by McLaren Traffic Engineering based on a 120 second "green time". The extrapolation is on a pro-rata basis. This provides a general estimate of queues. More detailed analysis would likely result in similar queue lengths.

The Council analysis has been undertaken for general conditions over the day and for the 9 times that truck manoeuvres will occur. A truck manoeuvre involves one truck leaving the crane loading zone and one entering simultaneously. If this does not occur then more than 9 truck manoeuvres resulting in delays would occur over the day.

The results of the analysis are presented in **Table 3.2**.

The Council assessment indicates 95%ile queues of around:

- 3. General conditions 140 metres or 18 vehicles.
- 4. Truck manoeuvres 255 metres or 33 vehicles.

The estimates of queues arising from truck manoeuvres would extend back past Yanko Avenue for eastbound traffic and back past Pacific Street for westbound vehicles.

More detailed assessment may provide more accurate estimates. Regardless, it is clear from the analysis that the queuing will have significant impacts.

In mitigation it should be noted that the queue estimates are vehicle flows during the morning and evening peak periods. Queues at other times would be substantially less.

Table 3.2: Extrapolation of McLaren reported queues to allow for 120 second green times under stop/go operation

Vehicles	Time (secs)	Queue length	Queue length
		(metres)	(vehicles)
	22		
	30		
	23		
	30		
	105		
	83		
	82		
167.4			
	46.1	64.7	8.3
175.7			
	45.1	63.1	8.6
	120		
	30		
	120		
	30		
	300		
	180		
	180		
167.4			
	100.0	140.3	18.0
175.7			
	99.0	138.5	18.9
nanoeuvres			
	30		
	180		
	120		
	330		
	330		
	330		
	184.4	258.8	33.2
	180.4	252.4	34.4
d traffic clearing the	e single lane		
	167.4 175.7 167.4 175.7	22 30 23 30 105 83 82 167.4 46.1 175.7 45.1 120 30 120 30 30 120 30 120 30 120 30 120 30 180 180 167.4 100.0 175.7 99.0 180 120 330 330 330 330 330 330 330 3	Vehicles Time (secs) length (metres) 22 30 30 23 30 105 83 82 167.4 46.1 64.7 175.7 45.1 63.1 120 30 30 120 30 300 180 180 180 175.7 99.0 138.5 nanoeuvres 30 180 120 330 330 330 330 330 330 330 330 184.4 258.8 180.4 180.4 252.4 252.4

3.4 Implications for on-street parking

On-street parking on Macpherson Street between Pembroke Street and Tipper Avenue will not be available from late in Day 1 to 11.30 pm on Day 2 of the operation. This will have a major impact on residents during this time.

4. Financial Information for Council's Consideration

The applicant will be required to meet the cost of all traffic control, Council supervision, NSW Police presence (if required) and damage restoration associated with the road closure.

5. Attachments

- 1. 200616 383C DIGGES Install Managment Plan 1 day 🗓
- 2. 200616 383C DIGGES Public Notification Letter r2 🗓 .



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INSTALL MANAGEMENT PLAN

3 Storey Multires Building

PROJECT: 383C - DIGGES

ISSUE 01 - One day install

DATE 16th JUNE 2020

Precom Pty Ltd ABN 45115360524 33-35 Garden Street Kilsyth, Victoria, 3137 Australia Tel +613 9761 5544 Fax+ 613 9761 5572

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1.0 INTRODUCTION

Prebuilt has been engaged by Digges David and Carolyn to manufacture and install a three-storey modular building positioned on the in-situ concrete basement, at 175 Macpherson Street – Bronte - NSW. The purpose of this report is to describe the activities sequence and installation methodology of the modules on site.

2.0 ACTIVITY:

The nine modules that constitute the building will be parked along Macpherson street, in the position outlined by the Traffic Management Plan and installed by a 300-ton mobile crane from trucks to the site.

3.0 SITE ADDRESS:

175 Macpherson Street - Bronte - NSW

4.0 APPLICANT:

Prebuilt Pty. Ltd.

5.0 EVENT DATE:

14th of July 2020

6.0 EVENT TIMELINE:

A day before installing 13th July:

- 6:00 am Traffic management commencing work.
- Commence of parking prevention on two sides of Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street.
- 10:00 pm onward Partial road closure commence along Macpherson Street starting from Pembroke st. intersection up to no. 183 Macpherson Street.
- Get ready for trucks arrival.

Day of install 14th July:

- 2:30 am Trucks with modules arrive onsite and park along Macpherson Street in single file. Modules will arrive in stages accordingly with the install timetable (see par. 7.2).
- 5:00 am onwards Partial road closure commences on Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street.

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- 5:00 am to 5:30 am 5 x semi-trailer with crane counterweights arrive, and the mobile crane arrives onsite.
- 5:30 am to 07:30 am Crane set up. Counterweights offload to crane and semi-trailer leave the site. Trucks with modules park along Macpherson road and reposition ready for lifting.
- 07:30 am to 09:30 pm Lift 9 no. modules into position. Unloaded trucks leave the site.
- 09:30 pm to 11:30 pm Contractors pack up and leave the site. Crane counterweights
 offload to semi-trailers and leave the site. Crane will be parked on the side of Macpherson
 Road overnight due to travel restrictions. Safety bollards will surround crane. Road
 restrictions will be resized gradually right after the trucks leave the area.

15th July 2020:

• Crane will leave the site.

7.0 DESCRIPTION OF THE PROPOSED MEASURES:

Please read the points below in conjunction with attached drawings:

- Appendix 1 Traffic Control Plan
- Appendix 2 Crane Install Plan
- Appendix 3- Modules lifting sequence
- Appendix 4- Traffic Engineer Advise

7.1 Route for trucks/ crane entering site (according to sequence) and parking:

Trucks with Modules

- Trucks with Modules will enter Macpherson Street via Carrington Rd.
- Trucks will drive-in forward direction, possible trucks to reverse back onto Tipper Ave after unloading, with the assistance of Traffic Controllers. (this happen during off-peak hours)
- Park along Macpherson Street in single file to maintain 1x lane access for other vehicles

Actual as-built modules size

Modules	Length (m)	Width (m)	Height (m)	Module Weight (T.)
mod 1	14.6	4.1	3.4	
mod 2	14.6	4.3	3.4	
mod 3	10.6	2.5	3.4	
mod 4	8.4	2.9	3.5	
mod 5	14.8	4.0	3.5	17T (max weight)
mod 6	14.8	4.2	3.5	
mod 7	15.6	4.1	3.5	
mod 8	12.1	4.0	3.8	
mod 9	12.1	2.2	3.8	

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Truck size, including module:

Truck	Module	Length (m)
Truck 1 (lift 1)	Mod 3	19
Truck 2 (lift 2)	Mod 2	23
Truck 3 (lift 3)	Mod 1	23
Truck 4 (lift 4)	Mod 7	24
Truck 5 (lift 5)	Mod 6	23
Truck 6 (lift 6)	Mod 5	23
Truck 7 (lift 7)	Mod 4	19
Truck 8 (lift 8)	Mod 8	20
Truck 9 (lift 9)	Mod 9	20

Crane counterweight semi-trailers:

- 5 x Semi-trailers with crane counterweight drive along Macpherson Road and turn around at Bronte Road with the assistance of Traffic Controllers (at staggered times).
- Park on Macpherson (from Calaga Place junction to no. 179 Macpherson Road.)
- Counterweight semi-trailers dimension: 19m x 2.5m

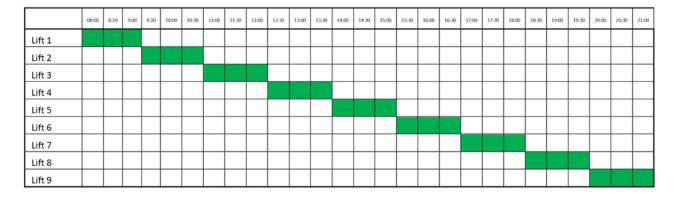
300T Mobile Crane

- Mobile crane enters site via Carrington Rd and set up on 175 Macpherson Street.
- Crane counterweight semi-trailers reverse back to the crane, offload counterweight to crane and leave the site in a forward direction.

7.2 Modules Lifting sequence:

Trucks will manoeuvre to the crane for lifting one module at a time in the following sequence

- 1st lift (Module 3), 2nd lift (Module 2), 3rd lift (Module 1), 4th lift (Module 7), 5th lift (Module 6), 6th lift (Module 5), 7th lift (Module 4), 8th lift (Module 9), 9th lift (Module 8)
- Road restriction on Macpherson St from no. 147 to no. 165 will be reduced after the last semi-trailer loading the counterweight leaves at 09:30 pm on the 14-07.
- Aim to complete lifting of all the modules by 09:30 pm on the 14-07.



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7.3 Route for trucks exiting site:

- After the modules have been unloaded from their respective trucks, the trucks will exit the site in a forward direction one at a time.
- Trucks will exit via: Trucks once unloaded will go past crane and do a U-Turn at the end of Macpherson St. and go back past crane and exit along Macpherson st past other modules.
- Truck size without load: Length 19m x Width 2.5m.

7.4 Route for mobile crane or exiting site:

- The night between the 14-07 and 15-07 the crane will be parked in front of the site within the delimited area
- On the 15-07 after crane is packed up, it will leave the site the following morning through Bronte Road.

7.5 Identification and assessment of the impact of proposed measures:

Parking prevention

Area: 2 sides of Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street

Duration: From 13th July 2020 6:00 am to 14th July 2020 11:30 pm.

Partial road closure

Area: 1 side of Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street

Duration: From 13th July 2020 10:00 pm to 14th July 2020 11:30 pm.

Full road closure

Area: no full road closure

Duration: \\

7.6 Measures to alleviate the impact

- An accredited Traffic Management Company will be hired to help with the traffic.
- Refer to the attached Appendix 1 Traffic Control Plan for proposed measures to be taken by Traffic Logistic to mitigate the impact.
- Trucks will park in single file to allow road open to traffic during install.
- Pedestrian access will be maintained with the assistant of Traffic Management.
- NSW and Vic Roads permit will be obtained by Transportation Company for oversize trucks.
 Escorts/conditions are dictated by NHVR permit conditions/specifications.

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7.7 Assessment of public transport services affected.

Bus stop positioned in front of the site will be affected. Bus Stop will be relocated to East of the Closure Tippe Ave and Bronte Road. Traffic Controller will need to make sure that sufficient room is allocated for busses to pull in and out. All busses will be given the right of way as they approach the closure.

7.8 Details of the provision made for emergency vehicles, heavy vehicles, cyclists and pedestrians.

- Works will be stopped if any emergencies or accidents occur, and access will be provided to emergency vehicles.
- Pedestrian and cyclist access will be maintained.

7.9 Assessment of effect on existing and future developments with transport implications in the vicinity of the proposed measures.

Not applicable. The partial road closure will only be temporary (1 day only), and the use of offsite modular construction will minimise construction transport implications to the area compared to the in-situ construction process.

7.10 Public Notification process

The Traffic Logistic company will complete a letterbox drop and door knock to inform all neighbours in the vicinity one week prior to the delivery of the modules.

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8.0 Transportation, Crane and Traffic Management Contractors

Transportation contractor: Reed Logistics Australia Contact: Matthew Reed

Phone: (03) 8773 8600 - 0407 699 966

Crane contractor:

Company: Wilson Mobile Crane

Contact: Rod Wilson

Phone: 02 9831 2055 - 0412 763 945

Traffic Management contractor: Company: Traffic Logistics Contact: Jorge Fonseca

Phone: (02) 4648 2200 - 0428 028 261

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Waverley Traffic Committee 25 June 2020

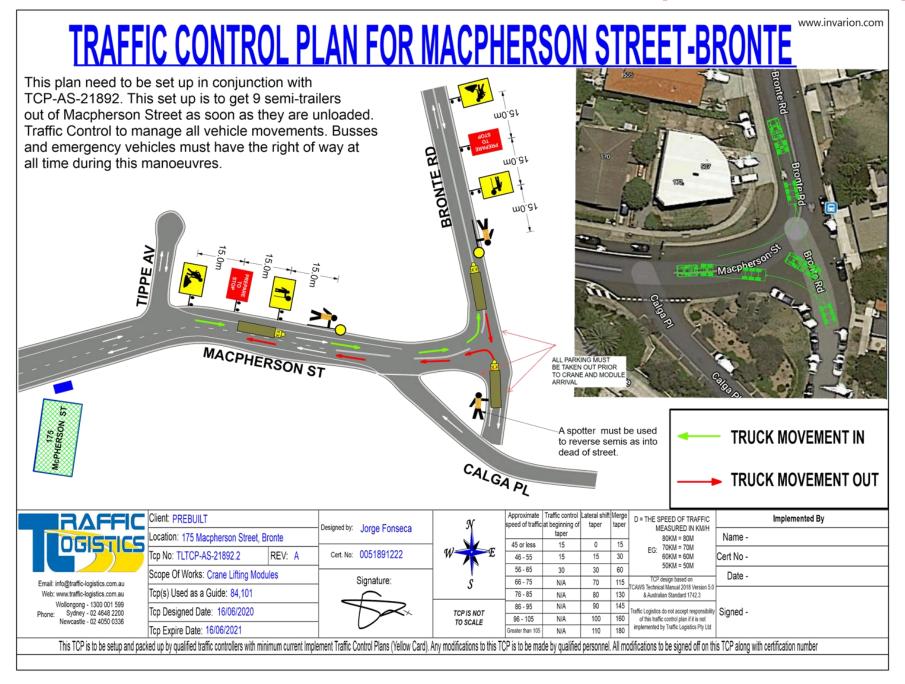
APPENDIX 1



TC/C.02/20.06- Attachment 1 Page 35

Waverley Traffic Committee 25 June 2020

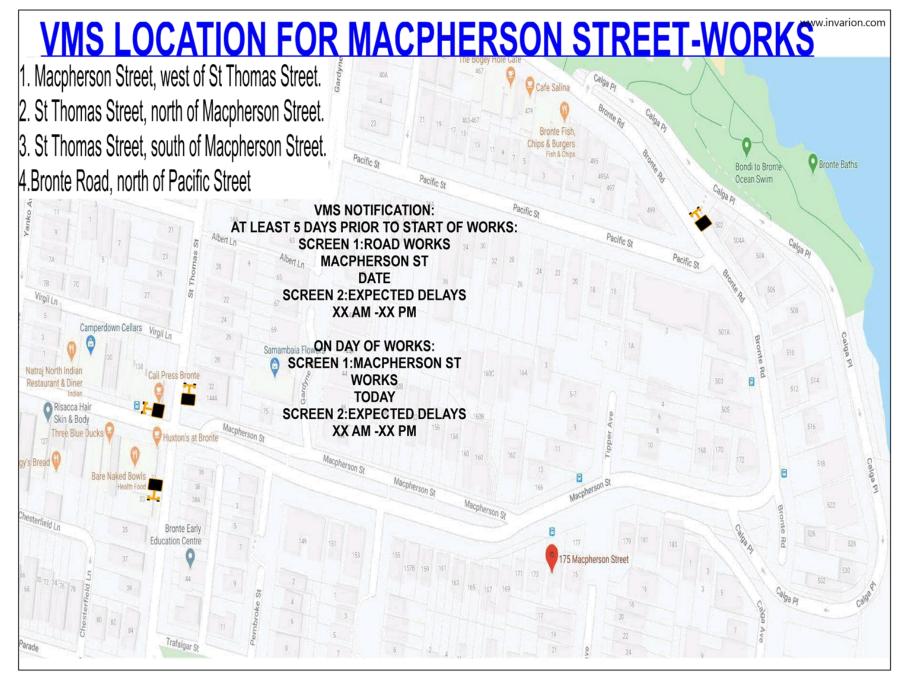
APPENDIX 1 U-turn route for the 9no. unloaded semi-trailer to exit from Macpherson st.over the event day



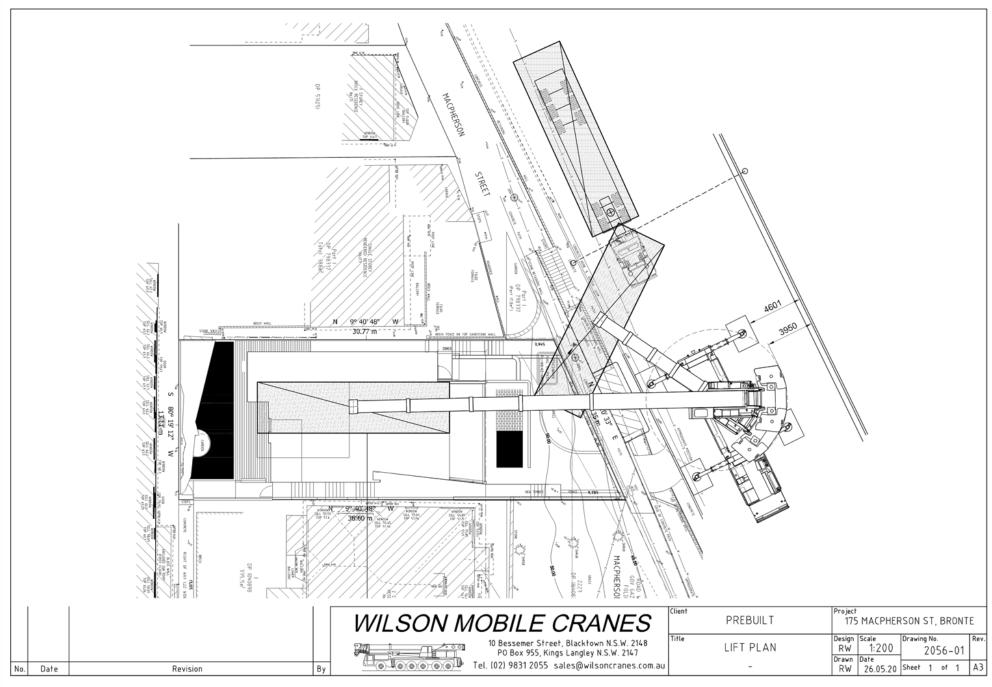
TC/C.02/20.06- Attachment 1 Page 36

Waverley Traffic Committee

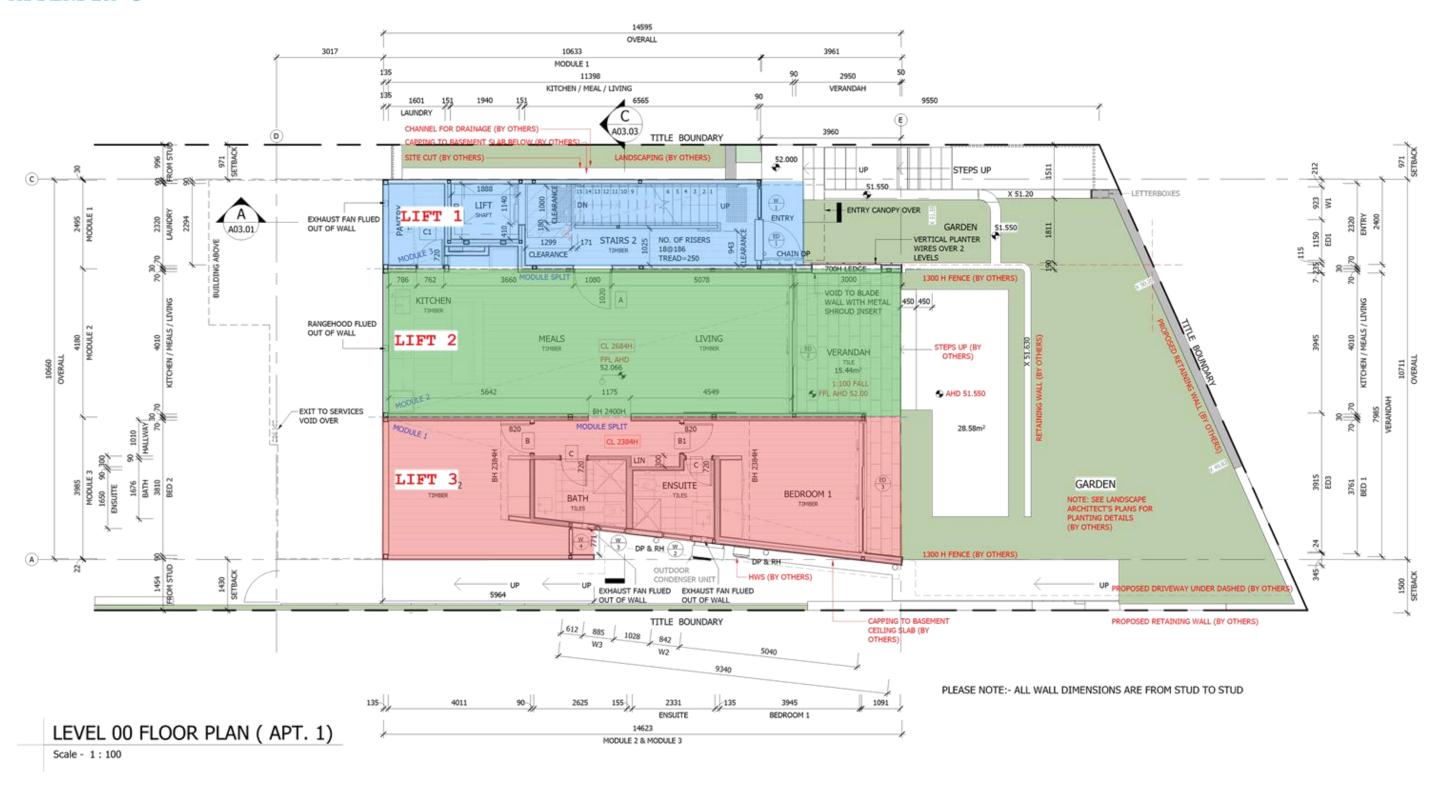
APPENDIX I



APPENDIX Z



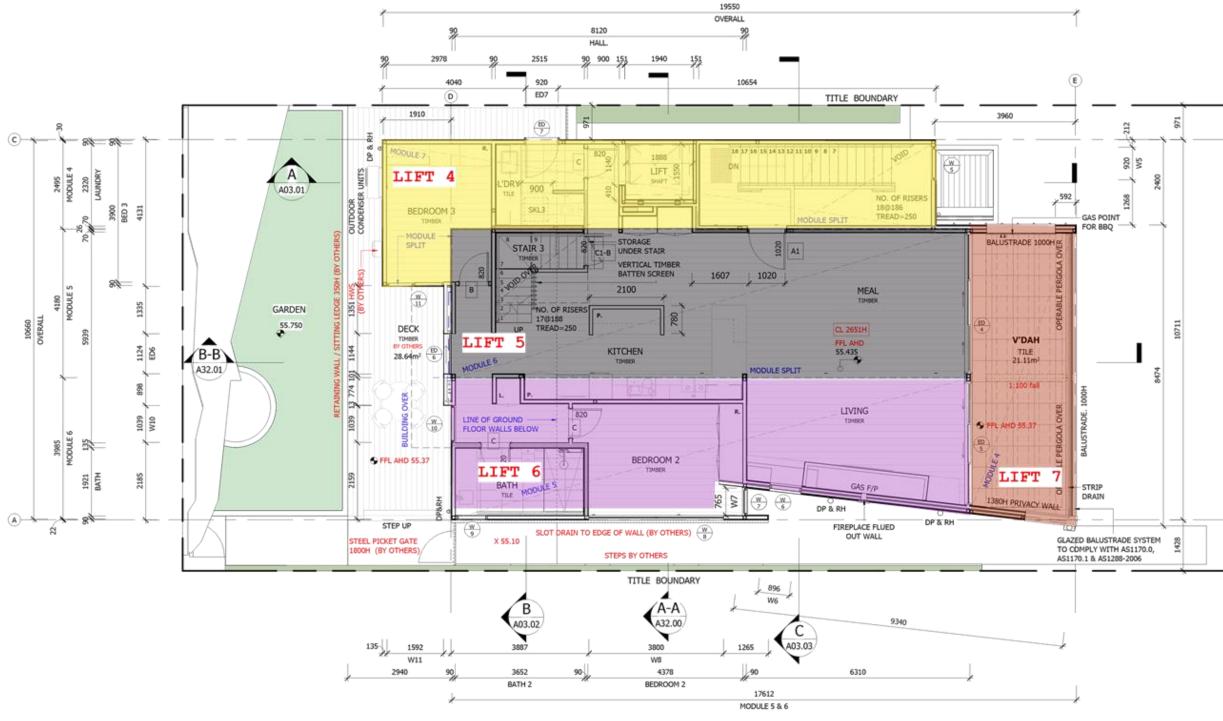
APPENDIX 3





TC/C.02/20.06- Attachment 1

APPENDIX 3



LEVEL 01 FLOOR PLAN (APT.2)

PLEASE NOTE:- ALL WALL DIMENSIONS ARE FROM STUD TO STUD

PREBUILT:

33 GARDEN STREET, KILSYTH VICTORIA 3137

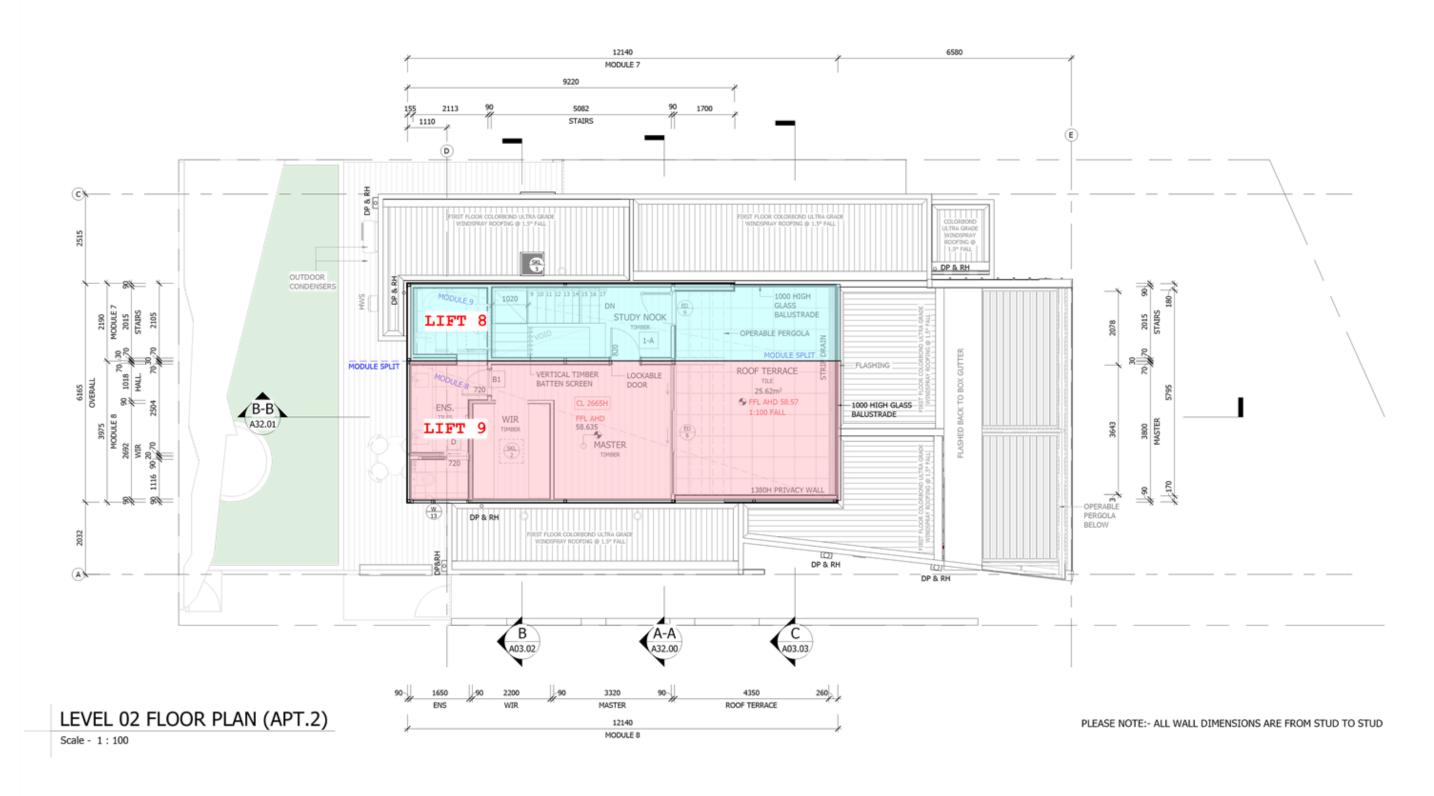
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TELEPHONE + 613 9761 5544 FACSIMILE + 613 9761 5572 info@prebuilt.com.au www.prebuilt.com.au

	. 3	These plans, designs and specifications and the copyright therein are the property of Prebuilt Pty Ltd			Description	Ву	Date	Project Name:	Drawn by:	
	(Patent Pending) and must not be reproduced or copied wholly or in part without the written permission of Prebuilt Pty Ltd. All dimensions and levels to be checked on the job before commencing any work or shop drawings. DO NOT Scale drawings.			A	PRELIMINARY CONTRACT	A.C	20.07.2018	DIGGES DEVELOPMENT	E.M	
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								303C	CONSTRUCTION	

TC/C.02/20.06- Attachment 1

APPENDIX 3





TC/C.02/20.06- Attachment 1

MCLAREN TRAFFIC ENGINEERING

Address: Shop 7, 720 Old Princes Highway Sutherland NSW 2232 Postal: P.O Box 66 Sutherland NSW 1499

Telephone: +61 2 8355 2440
Fax: +61 2 9521 7199
Web: www.mclarentraffic.com.au
Email: admin@mclarentraffic.com.au

Division of RAMTRANS Australia ABN: 45067491678 RPEQ: 19457

Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

16 June 2020 Reference: 200401.01FC

Prebuilt Pty Ltd 33 Garden Street, Kilsyth, VIC 3137

Attention: Matteo Cuccu

TRAFFIC ADVICE OF MODULAR BUILDING INSTALLATION AT 175 MACPHERSON STREET, BRONTE

Dear Matteo.

Reference is made to your request to provide traffic advice for the proposed modular building installation at 175 Macpherson Street, Bronte. The proposed Install Management Plan, which includes the details pertaining to the traffic management measures proposed, for the modular building is reproduced in **Annexure A** for reference.

1 Traffic Volumes

An assessment of the impact of the proposed traffic management measures, which include the partial closure of the road, has been undertaken using SIDRA Intersection 9.0. The traffic volumes used for the assessment are based on data provided by Waverley City Council reflecting an Average Annual Daily Traffic (AADT) volume of approximately 3100 vehicles per day (1494 eastbound, 1597 westbound). The source of this data is the Waverley Council 40km/h Speed Zone review which was undertaken by Bitzios Consulting in 2019.

Generally as a conservative measure, it can be assumed that the peak hour volumes of a road are approximately 10% of the AADT volume (noting that an hour only constitutes less than 5% of a 24-hour period). In addition to the Council's data, bus volume data has been obtained from the CompassIOT system and added to the indicative AADT volumes. The resulting peak hour data used in the SIDRA model is presented in **Table 1**.

TABLE 1: PEAK HOURLY VOLUMES USED FOR ANALYSIS

Туре	Eastbound	Westbound
Car	149.4	159.7
Bus	18	16
Total	167.4	175.7

Modular Building Installation 175 Macpherson Street, Bronte 200401.01FC - 16 June 2020 Page 1 of 7



2 Method of Analysis

To provide for an estimation of the function of the proposed partial road closure, the SIDRA model has been created as a signalised system to restrict flow to one-way at any given time and to provide additional red-time for vehicles to clear the single-lane length of road. The modelled layout and phase timing is depicted in **Figure 1**.

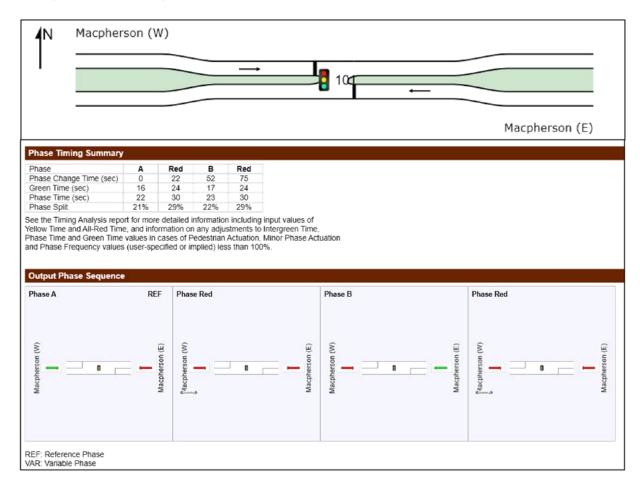


FIGURE 1: SIDRA MODEL DETAILS

The length of the "Red" phases depicted in **Figure 1** was conservatively estimated based on the following:

- The partial road closure will reduce Macpherson Street to a single traffic lane for approximately 268m;
- At 40km/h it will take a vehicle approximately 24 seconds to travel 100m;
- An extra 6 seconds of phase time provides for an extra buffer for vehicles to clear the 100m length of single lane before traffic begins to travel in the opposite direction.

Modular Building Installation 175 Macpherson Street, Bronte 200401.01FC - 16 June 2020 Page 2 of 7



3 Results

The results of the SIDRA model are summarised in **Table 2**, with detailed results provided in **Annexure B** for reference.

TABLE 2: RESULTS OF SIDRA ASSESSMENT

Direction	Average Delay	Level of Service	95 th Percentile Queue Length	Optimal Cycle Time
Eastbound	46.1	D	8.3 vehicles (64.7m)	105 Seconds
Westbound	45.1	D	8.6 vehicles (63.1m)	100 Seconds

As shown in **Table 2**, the partial lane closure will result in minor delays during the peak hour, with lesser delays to occur during shoulder and off-peak hours. Queues are predicted to be approximately 65m or less during the duration of the partial road closure.

Considering that the proposed construction activities will be limited to 2-3 days, the short delays to traffic in both directions are acceptable.

4 Potential Impacts on Bus Services

Macpherson Street is used as part of several bus routes, with buses travelling in both directions along the Street throughout the day. It has been advised by the traffic control contractor, Traffic Logistics, that buses will be given priority by traffic controllers where possible to reduce any potential for delays to bus services.

It is advised that the following procedure is appropriate to balance the needs for both a regular split between eastbound and westbound traffic and to reduce the delays on bus services:

- Traffic controllers should allow approximately 30 seconds between directional flow changes;
- If a bus is approaching from the direction that is currently permitted to flow, the traffic controllers should allow that bus through before stopping traffic from that approach;
- If a bus is queued on the approach that is currently stopped, the traffic controllers should switch the direction of flow sooner under their own discretion.

By following the above guidelines, buses should experience less than the average delay of approximately 28 seconds expected for all traffic without compromising overall traffic flow efficiency.

5 Impacts During Truck Movements

The movement of laden and unladen vehicles into and out of the works zone will require that all vehicles be stopped in both directions temporarily for approximately three (3) minutes. Considering that the movement of trucks will be a discrete event, after which queues will dissipate, and based on the traffic flow characteristics of Macpherson Street as outlined previously in **Table 1**, the queue length in each direction can be estimated using the average arrival rate. The results of this assessment are provided in **Table 3**.

Modular Building Installation 175 Macpherson Street, Bronte 200401.01FC - 16 June 2020 Page 3 of 7



TABLE 3: AVERAGE QUEUES DURING TRUCK ENTRY/EXIT OF WORKS ZONE

Direction	Vehicles per Hour	Vehicles per Minute	Duration that traffic is stopped	Vehicles Arriving per 3 Minutes	Estimated Queue Length ⁽¹⁾	
Eastbound	167.4	2.79	3 minutes	9	61m	
Westbound	175.7	2.92	3 minutes	9	61m	

Notes:

(1) Based on a 10% proportion of 13m long buses, with the remaining 90% 6m long cars.

6 Swept Path Testing

Swept path testing has been undertaken, with the results provided in **Annexure C** to demonstrate how an articulated vehicle will exit the site after making a delivery. The options provided in the Install Management Plan have been assessed, with the only viable choice being that vehicles travel eastwards to Bronte Street and use the intersection to undertake a U-Turn. Traffic controllers will be required to stop traffic in both directions to facilitate this movement.

It is recommended the Install Management Plan be amended to:

- Remove references to other methods of turning around, as none are physically possible other than the use of Bronte Street;
- Temporarily remove parking on both sides of Bronte Street in the areas marked with a red line on the swept path test as reproduced in **Annexure C**;
- Position an additional traffic controller approximately 10m north of the Bronte Street/Macpherson Street junction.

It is noted that the crane vehicle will also make this manoeuvre and that the crane operator has advised that the vehicle specifications are consistent with the 19m long articulated vehicle as tested in **Annexure C**.

Please contact the undersigned should you require further information or assistance.

Yours faithfully

McLaren Traffic Engineering

Tom Steal

Senior Traffic Engineer

BE Civil AMAITPM MIEAust

RMS Accredited Level 2 Road Safety Auditor

Modular Building Installation 175 Macpherson Street, Bronte 200401.01FC - 16 June 2020 Page 4 of 7



ANNEXURE A: INSTALL MANAGEMENT PLAN (11 SHEETS)



ANNEXURE B: SIDRA RESULTS (1 SHEET)

MOVEMENT SUMMARY

Site: 101 [Peak Hour (10% AADT) - 268m (Site Folder:

General)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 105 seconds (Site Optimum Cycle Time - Minimum

Delay)

Vehicle Movement Performance														
Mov ID	Turn	INP VOLU [Total veh/h		DEM, FLO [Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUI [Veh. veh	ACK OF EUE Dist] m	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East:	Macpl	nerson (E		V 01 III 1	,,,	,,,			7011					13.17
5	T1	176	16	176	9.1	* 0.589	45.1	LOS D	8.6	64.7	0.98	0.80	0.98	34.4
Appro	oach	176	16	176	9.1	0.589	45.1	LOS D	8.6	64.7	0.98	0.80	0.98	34.4
West	: Маср	herson (\	W)											
11	T1	167	18	167	10.8	* 0.603	46.1	LOS D	8.3	63.1	0.98	0.80	0.98	34.1
Appro	oach	167	18	167	10.8	0.603	46.1	LOS D	8.3	63.1	0.98	0.80	0.98	34.1
All Vehic	eles	343	34	343	9.9	0.603	45.6	LOS D	8.6	64.7	0.98	0.80	0.98	34.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

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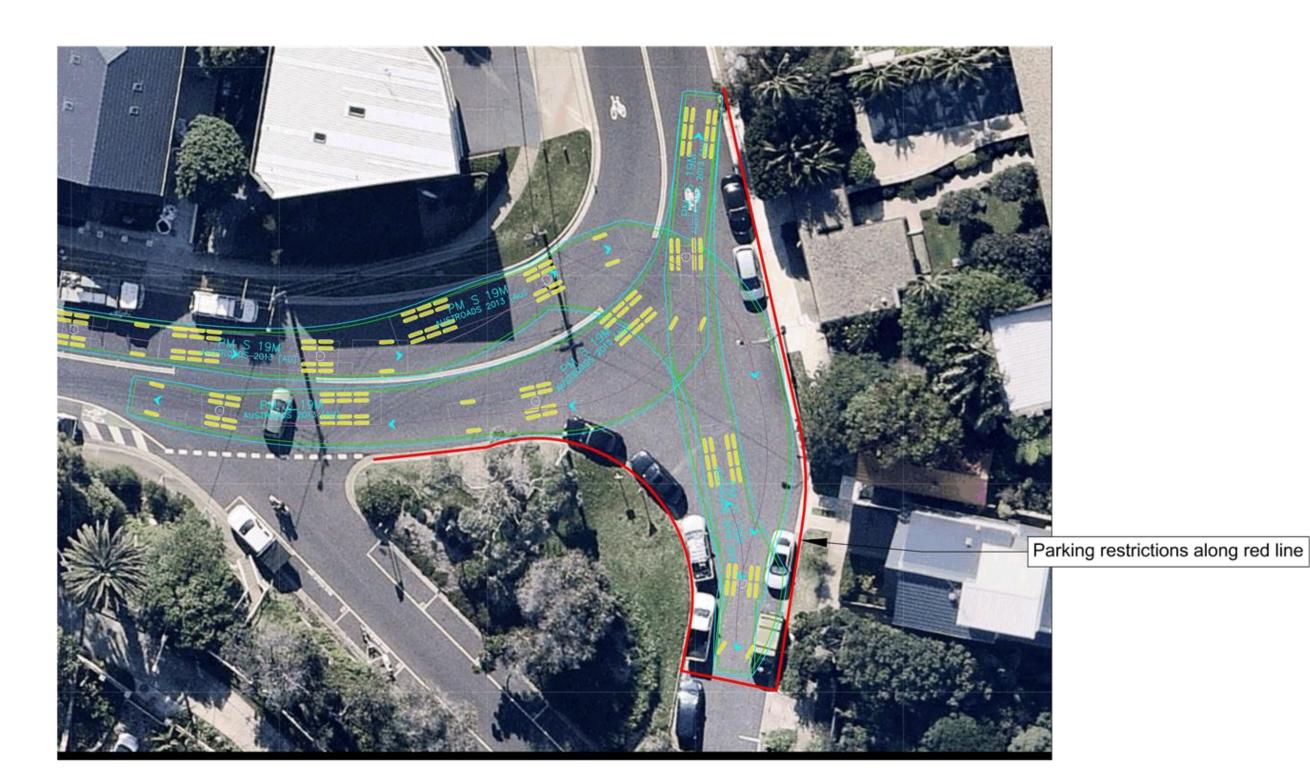
Organisation: MCLAREN TRAFFIC ENGINEERING | Licence: NETWORK / 1PC | Processed: Tuesday, 16 June 2020 4:43:05 PM

Project: C:\Users\tomth\Downloads\Test.sip9



ANNEXURE C: SWEPT PATH TEST (1 SHEET)

APPENDIX 4



PREBUILT.

Dear Resident and/or Business Owner,

Notification of Crane Works and a Temporary Partial Road Closure along Macpherson Street starting from Pembroke st. intersection up to no. 183 Macpherson Street

Tuesday 16th June 2020

Prebuilt (Modular Building Company) and Traffic Logistics (Traffic Controller) has submitted an application to Waverley Council to conduct a partial road closure on Tuesday 14th July 2020 at <u>175</u> <u>Macpherson St, Bronte</u>, ready for the delivery of prefabricated building modules. As such, crane works will be conducting at Macpherson Street on the nominated date above, lifting the building modules from delivery trucks to their final position on site.

Precautions will be taken to ensure the safety of all residents and personnel during these works. However, vehicle access to the community is limited during this time.

Please find attached document and information below detailing the activities that will take place during crane works so you can understand the likely impact:

· Partial road closure:

One traffic lane of Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street

Duration: From 13th July 2020 10:00 pm to 14th July 2020 11:30 pm.

Take out parking:

Two sides of Macpherson Street, starting from Pembroke st. intersection up to no. 183 Macpherson Street, at the end of Macpherson St intersection with Bronte Rd. Duration: From 13th July 2020 6:00 am to 14th July 2020 11:30 pm.

• There may be some noise impact related to these works.

We will try our very best to keep the impact to the minimum.

Once the crane works conclude, low impact finishing works will take place on-site to complete the building project. Whilst we understand that the disruption to residents/ business owner over the date above is inconvenient, the use of prefabrication has dramatically reduced the duration of the impact from typically six months down to 1 day.

Please see the back of this letter for Traffic Plan requirements. Traffic Logistics Requests motorists to obey all signs and instructions provided by Traffic Controllers at all times.

We thank you for your patience over this period, and we apologise for any inconvenience caused. Please be aware that the install timeline aforementioned could vary due to unforeseen events.

If you have any concerns or queries, please do not hesitate to call the Prebuilt office on (03) 9761 5544 (Contact person: Matteo Cuccu) email: matteo@prebuilt.com.au or the Traffic Management company, Traffic Logistic on 1300 001 599 (Contact person During business hours: Jorge Fonseca)) email: jorge@traffic-logistics.com.au

The proposed closure is currently being considered by Council. It has not been approved at this point in time. The nominated date may change if approval is not received by the Council in time.

All queries and responses will be logged and submitted to the Council prior to it determining the application. Please contact us prior to Tuesday next week (23 June 2020) so we can pass your responses on to Council.

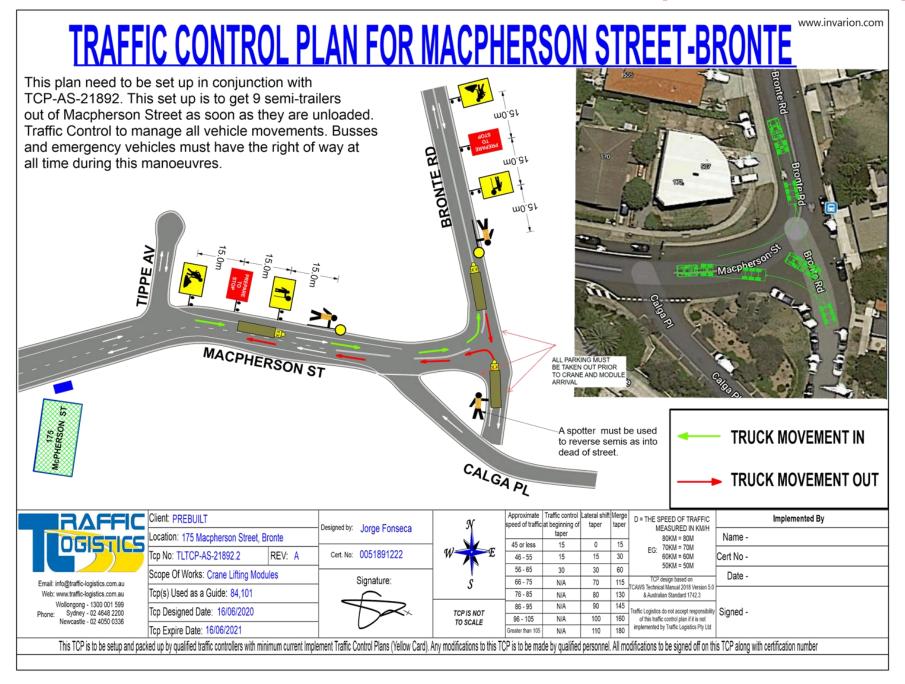
Yours sincerely,

Prebuilt Pty Ltd

A



APPENDIX 1 U-turn route for the 9no. unloaded semi-trailer to exit from Macpherson st.over the event day



WAVERLEY

REPORT TC/V.01/20.06

Subject: 48-50 Penkivil Street, Bondi - Construction Zone

TRIM No: A03/2514-04

Author: Hamoon Bahari, Professional Engineer, Traffic and Transport

Calum Hutcheson, Service Manager, Traffic and Transport

Director: Nikolaos Zervos, Acting Executive Manager, Infrastructure Services

COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs a 16 metre long "No Parking 7 am – 5 pm Mon – Fri, 8 am – 3 pm Saturday Council Authorised Vehicles" zone outside frontage of No. 48-50 Penkivil Street, Bondi.

2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

1. Executive Summary

Council has received an application from the builder/developer at 48-50 Penkivil Street, Bondi for the installation of a 16 metre construction zone. Council will need to exercise its delegated functions to implement the proposal.



Figure 1: Aerial image of 48-50 Penkivil Street, Bondi

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking Council Authorised Vehicles Excepted Excludes Public Holidays' for the approved construction hours under the development consent. Council will then supply applicants with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage with a minimum period of 13 weeks.



Figure 2: Construction works zone frontage

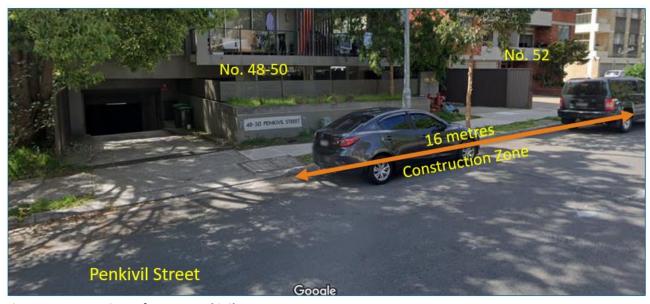


Figure 3: Street view of 48-50 Penkivil Street.

3. Technical Analysis

The applicant has applied for a 16 metre construction zone fronting No.48-50 Penkivil Street, Bondi.

Table 1. Application details.

Applicant	Stargate Building & Constructions Pty Ltd
Development application	DA-26/2017
Works	Addition of two levels to existing residential flat building
Approved hours of construction	7 am – 5 pm Monday – Friday; 8 am – 3 pm Saturday
Frontage length	19.4 metres (including driveway)
Road	Penkivil Street
Existing parking	Unrestricted parking
Requested length	16 metres (excluding driveway)
Proposed length	16 metres (excluding driveway)
Duration	25 May 2020 to 25 August 2020
Fee area	Residential with parking restrictions
Estimated fees	\$1,065.60 per week

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2019/20 financial year are:

- \$66.60 per m per week in a Residential Development Area.
- \$92.20 per m per week in a Commercial and mixed-use Development Area.
- \$370 per metred (ticket) car parking space per week in addition to above fees (where applicable).

5. Attachments

Nil .

WAVERLEY

REPORT TC/V.02/20.06

Subject: 376 Military Road, Vaucluse - Construction Zone

TRIM No: A03/2514-04

Author: Hamoon Bahari, Professional Engineer, Traffic and Transport

Calum Hutcheson, Service Manager, Traffic and Transport

Director: Nikolaos Zervos, Acting Executive Manager, Infrastructure Services

COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs a 9 metre long "No Parking 7 am – 5 pm Mon – Fri, 8 am – 3 pm Saturday Council Authorised Vehicles" zone in front of No. 376 Military Road, Vaucluse.

2. Delegate's authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

1. Executive Summary

Council has received an application from the builder/developer at 376 Military Road, Vaucluse for the installation of a 9 metre construction zone. Council will need to exercise its delegated functions to implement the proposal.



Figure 1: Aerial image of 376 Military Road, Vaucluse

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking Council Authorised Vehicles Excepted Excludes Public Holidays' for the approved construction hours under the development consent. Council will then supply applicants with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage with a minimum period of 13 weeks.

The site frontage is 16.6 metres, 7 metres of which is taken up by a bus zone. This leaves 9.6 metres. The proposed length of 9 metres leaves 0.6 metres. The 0.6 metres plus 4.4 metres to the driveway on an adjacent property provides 5 metres on street which can accommodate a car outside the construction zone.



Figure 2: Construction works zone frontage

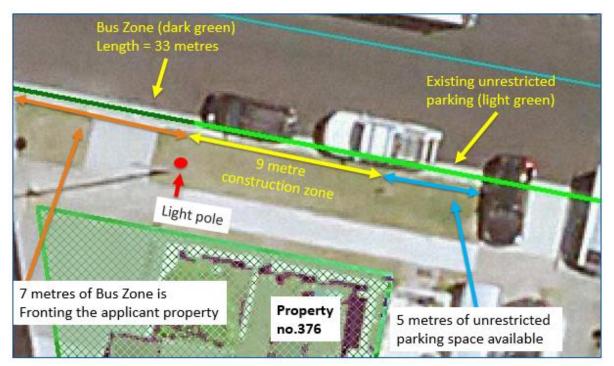


Figure 3: Construction Zone and Bus Zone

3. Technical Analysis

The site frontage spans 16.6 metres. This includes 7 metres of a bus zone which leaves 9.6 metres of length to be used by the construction zone. Installing a 9 metre construction zone allows for 5 metres to the adjacent site driveway which is enough to accommodate a car. See **Figure 4** below.



Figure 4: Street view of parking space behind proposed construction zone

Table 1. Application details.

Table 1.7 (pplication actains:	
Applicant	Marc Jared and Nicole Jodi Eliso
Development application	Approved Complying Development. Certificate Number: XC2020-/00059
Works	Construction of a two storey dwelling
Approved hours of construction	7 am – 5 pm Monday – Friday; 8 am – 3 pm Saturday
Frontage length	16.6 metres (including 7 metres of Bus Zone)
Road	376 Military Road
Existing parking	Unrestricted parking
Requested length	9 metres (excluding driveway and 0.6 metres to accommodate a 5 metre on street parking space)
Proposed length	9 metres (excluding driveway)
Duration	27 July 2020 to 28 February 2021
Fee area	Residential with parking restrictions
Estimated fees	\$599.40 per week

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2019/20 financial year are:

- \$66.60 per m per week in a Residential Development Area.
- \$92.20 per m per week in a Commercial and mixed-use Development Area.
- \$370 per metred (ticket) car parking space per week in addition to above fees (where applicable).

5. Attachments

Nil.

WAVERLEY

REPORT TC/V.03/20.06

Subject: 62 Gilgandra Road, North Bondi- Construction Zone

TRIM No: A03/2514-04

Author: Hamoon Bahari, Professional Engineer, Traffic and Transport

Calum Hutcheson, Service Manager, Traffic and Transport

Director: Nikolaos Zervos, Acting Executive Manager, Infrastructure Services

COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs a 9 metre long "No Parking 7 am – 5 pm Mon – Fri, 8 am – 3 pm Saturday Council Authorised Vehicles" zone in front of No. 62 Gilgandra Road, North Bondi.

2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

1. Executive Summary

Council has received an application from the builder/developer at 62 Gilgandra Road, North Bondi for the installation of a 9 metre construction zone. Council will need to exercise its delegated functions to implement the proposal.



Figure 1: Aerial image of 62 Gilgandra Road, North Bondi

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking Council Authorised Vehicles Excepted Excludes Public Holidays' for the approved construction hours under the development consent. Council will then supply applicants with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage with a minimum period of 13 weeks.



Figure 2: Construction work zone frontage

3. Technical Analysis

Table 1: Application details

Applicant	Janet Brown
Development application	DA216/2018/A
Works	Modification to alter internal layout, additional floor space, new awning and various other alterations
Approved hours of construction	7 am – 5 pm Monday – Friday; 8 am – 3 pm Saturday
Frontage length	9 metres
Road	Gilgandra Road
Existing parking	Unrestricted parking
Requested length	9 metres (including driveway)
Proposed length	9 metres (including driveway)
Duration	30 June 2020 to 30 June 2021

Fee area	Residential with parking restrictions
Estimated fees	\$599.40 per week

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2019/20 financial year are:

- \$66.60 per metre per week in a Residential Development Area.
- \$92.20 per metre per week in a Commercial and mixed-use Development Area.
- \$370 per metred (ticket) car parking space per week in addition to above fees (where applicable).

5. Attachments

Nil.