

WAVERLEY TRAFFIC COMMITTEE MEETING

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

10.00 AM, THURSDAY 28 APRIL 2022

Waverley Council PO Box 9 Bondi Junction NSW 1355 DX 12006 Bondi Junction Tel. 9083 8000 E-mail: info@waverley.nsw.gov.au

AGENDA

Apologies

Declarations of Interests

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 24 March 2022 were adopted by Council at its meeting on 12 April 2022.

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

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Approves the cycleway design for Birrell Street, Waverley, attached to the report.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.
- 3. Delegates authority to the Executive Manager, Infrastructure Services, in consultation with Transport for NSW to modify the design to locate the parking lane against the kerb and the bicycle path between the parking and travel lanes.

TC/C.02/22.04 Bronte Road, Waverley - Pick-Up/Drop-Off (PUDO) Bay (A20/0336)......26

COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs a 5.7 metre pick-up/drop-off (PUDO) bay, 6 pm–3 am, on the eastern side of Bronte Road outside 244–246 Bronte Road, Waverley.

2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of the PUDO bay, as necessary.

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9.7 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 22 Cross Street, Bronte.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/22.04	Murriverie Road, North Bondi - Bus Zone Modification and 'P Disability Only'
	Parking Zone (A20/0534)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Reduces the length of the bus zone outside 38, 40 and 42 Murriverie Road, North Bondi, from 30 metres to 20 metres.
- 2. Installs a 5.4 metre 'P Disability Only' parking zone in front of 42 and 44 Murriverie Road, North Bondi, and removes the 'P Disability Only' parking zone in front of 53 Murriverie Road.

TC/V.02/22.04	Chaleyer Street and Hardy Street Intersection, Rose Bay/Dover Heights - 'No				
	Stopping' Zones (A14/0145) 3	39			

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9.2 metre 'No Stopping' zone on the northern side of Chaleyer Street, west of Hardy Street, Rose Bay/Dover Heights.
- 2. Installs a 9.2 metre 'No Stopping' zone on the southern side of Chaleyer Street, west of Hardy Street, Rose Bay/Dover Heights.
- 3. Installs a 10 metre 'No Stopping' zone on the western side of Hardy Street, north of Chaleyer Street,

Rose Bay/Dover Heights.

TC/V.03/22.04	4 Bonus Street, North Bondi - 'P Disability Only' Parking Zone - Removal
	(A20/0534)

COUNCIL OFFICER'S PROPOSAL:

That Council removes the 6 metre 'P Disability Only' parking zone outside 4 Bonus Street, North Bondi.

TC/V.04/22.04	10 and 12 Wairoa Avenue, North Bondi - 'P Motor Bikes Only' Parking Zone
	(SF22/1343)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' parking zone in the kerbside lane between the driveways of 10 and 12 Wairoa Avenue, North Bondi.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zone, as necessary.

TC/V.05/22.04	11 and 13 Napier Street, Dover Heights - 'P Motor Bikes Only' Parking Zone
	(A21/0065)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' parking zone in the kerbside lane between the driveways of 11 and 13 Napier Street, Dover Heights, set back 900 mm from the driveways.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zone, as necessary.

TC/V.06/22.04 79-103 Wellington Street, Bondi Beach - Construction Zone (A03/2514-04) 55

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 20 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 95–103 Wellington Street, Bondi Beach.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.

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

TC/V.07/22.04	23 Curlewis Street, Bondi Beach - Construction Zone in Wellington Street	
	(A03/2514-04))

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 6 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone south of 23 Curlewis Street in Wellington Street, Bondi Beach.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

TC/CV ELECTORATES OF COOGEE AND VAUCLUSE

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

TC/TEAV.01/22.04	140 Clyde Street, North Bondi - Angle Parking and Passing Bays
	(DA-314/2021)

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Should DA-314/2021 be approved with an increase in the number of childcare places from 27 to 43 at 140 Clyde Street, North Bondi:
 - (a) Angle parking will be required in Clyde Street in accordance with the concept plan contained in Figure 1 of the report. This is required to accommodate the parking demands associated with the 16 additional childcare places. Consent conditions should have the approval being contingent on 4 additional on-street parking spaces being provided.
 - (b) The proposed timed restrictions for 4 on-street parking spaces are supported subject to community consultation. Consent conditions should reflect this. The cost of installation is to be borne by the applicant if the restrictions are approved by Council.
 - (c) The proposed passing bays are supported. The locations and number of bays are to be subject to community consultation. Consent conditions should reflect this. The cost of installation is to be borne by the applicant if the restrictions are approved by Council.
- 2. Changes to the parking restrictions in the vicinity of the site will be subject to a separate report to the Traffic Committee should the development be approved. The proposal will be assessed on its merits at that time.

TC/TEACV ELECTORATES OF COOGEE AND VAUCLUSE

Nil.

MINUTES OF THE WAVERLEY TRAFFIC COMMITTEE MEETING HELD BY VIDEO CONFERENCE ON THURSDAY, 24 MARCH 2022



Voting Members Present:

Cr P Masselos	Waverley Council – Chair
Snr Cst A Birchansky	NSW Police – Eastern Suburbs Police Area Command – Traffic Services
Mr P Pearce	Representing Marjorie O'Neill, MP, Member for Coogee
Mr R Sritharan	Transport for NSW – Network and Safety Officer
Also Present:	
Mr B Gidiess	State Transit – Traffic and Services Manager (Eastern Region)
Mr B Midgley	PDC Consultants – Principal Traffic Engineer
Mr D Joannides	Waverley Council – Executive Manager, Infrastructure Services
Mr C Hutcheson	Waverley Council – Service Manager, Traffic and Transport
Mr N Zervos	Waverley Council – Manager, Asset Systems and Planning
Mr M Almuhanna	Waverley Council – Senior Traffic Engineer
Mr P Cai	Waverley Council – Traffic Engineer
Mr S Shaw	Waverley Council – Co-ordinator, Sustainable Energy and Resilience
Ms B Wang	Waverley Council – Professional Engineer, Traffic and Development
Cr L Fabiano	Waverley Council
Cr T Kay	Waverley Council
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At the commencement of proceedings at 10.00 am, those present were as listed above.

Apologies

Apologies were received and accepted from Ms J Zin (representing Gabrielle Upton, MP, Member for Vaucluse).

Declarations of Pecuniary and Non-Pecuniary Interests

The Chair called for declarations of interest and the following was received:

 Cr P Masselos declared a less than significant non-pecuniary interest in item TC/C.01/22.03 – 40 km/h Speed Limit Changes – Traffic Control Devices – Park Parade and Dickson Street at Birrell Street, Bondi, and informed the meeting that she lives in Murray Street.

Adoption of Previous Minutes by Council - 24 February 2022

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 24 February 2022 were adopted by Council at its meeting on 15 March 2022 with the following change:

1. TC/V.01/22.02 – Chaleyer Street, Rose Bay – Passing Bays.

Council adopted the recommendation of the Traffic Committee subject to the deletion of clauses 1(b) and 1(d) and the addition of new clauses such that the recommendation now reads as follows:

That Council:

- 1. Installs 'No Parking' zones across the driveways of the following addresses along Chaleyer Street, Rose Bay, as shown in Figure 4 of the report:
 - (a) 117 and 119.
 - (b) 56 and 58.
 - (c) 23.
 - (d) 6 and 8.
 - (e) 1 and 457 Old South Head Road.
- 2. Defers for three months the installation of 'No Parking' zones across the following addresses along Chaleyer Street for further discussion with residents
 - (a) 91 and 95 because one was against and one was no response.
 - (b) 28 and 30 because one was against and one was no response.
- 3. Officers review the effect of the installation of the 'No Parking' zones on traffic flow and congestion and prepare a report to Council after six months from the time the zones have been installed.
- 4. Officers investigate the addition and/or extension of 'No Stopping' zones at each end of Chaleyer Street, with a report to be prepared for the Traffic Committee.

ITEMS BY EXCEPTION

The following items on the agenda were dealt with together and the Council Officer's Proposal for each item was unanimously supported by the Committee:

TC/C.02/22.03	37 Llandaff Street, Bondi Junction – 'P Disability Only' Zone.
TC/C.03/22.03	13/1 Silva Street, Tamarama – 'P Disability Only' Zone.
TC/C.04/22.03	20 Illawong Avenue, Tamarama – Construction Zone.
TC/V.01/22.03	Anzac Day – Ramsgate Avenue and Campbell Parade, North Bondi – Temporary Road Closure.
TC/V.02/22.03	Oceanview Avenue east of Old South Head Road, Vaucluse – Double Centre (BB) Line Marking.
TC/V.03/22.03	38 and 40 Roscoe Street, Bondi Beach – 'P Motor Bikes Only' Parking Zone.
TC/V.04/22.03	5 Strickland Street, Rose Bay – 'P Motor Bikes Only' Parking Zone.
TC/V.05/22.03	203 Military Road, Dover Heights – 'P Motor Bikes Only' Zone and 'No Stopping' Zone.
TC/V.06/22.03	82 Ramsgate Avenue, Bondi Beach – Construction Zone.
TC/V.07/22.03	10 Hastings Parade, North Bondi – Construction Zone.

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.01/22.0340 km/h Speed Limit Changes - Traffic Control Devices - Park Parade and Dickson
Street at Birrell Street, Bondi (A18/0579)

Cr P Masselos declared a less than significant non-pecuniary interest in this item and informed the meeting that she lives in Murray Street.

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Endorses the designs for the intersections of Park Parade/Birrell Street and Dickson Street/Birrell, as set out in Appendix D of the report by PDC Consultants attached to the report.
- 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 subject to the addition of a new clause 3 such that the recommendation now reads as follows:

That Council:

- 1. Endorses the designs for the intersections of Park Parade/Birrell Street and Dickson Street/Birrell, as set out in Appendix D of the report by PDC Consultants attached to the report.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.
- Together with Transport for NSW (TfNSW) and prior to any construction work proceeding, investigates the impacts of a 'No Right Turn' from Dickson Street into Birrell Street from 7.30 am to 9.30 am and officers prepare a report to the Traffic Committee, noting that a Traffic Management Plan is required in accordance with TfNSW requirements.

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

G Beard (on behalf of Bronte Precinct) addressed the meeting.

TC/C.02/22.03 37 Llandaff Street, Bondi Junction - 'P Disability Only' Zone (A20/0534)

COUNCIL OFFICER'S PROPOSAL:

That Council installs a 6 metre 'P Disability Only' parking zone in front of 35–37 Llandaff Street, Bondi Junction.

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).

TC/C.03/22.03 13/1 Silva Street, Tamarama - 'P Disability Only' Zone (A20/0534)

COUNCIL OFFICER'S PROPOSAL:

That Council installs a 5.4 m 'P Disability Only' parking zone on the northern side of Dellview Lane near Silva Street, Tamarama.

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).

TC/C.04/22.03 20 Illawong Avenue, Tamarama - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 10 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone on the southern side of Illawong Avenue near 20 Illawong Avenue, Tamarama.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. 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 Coogee, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/22.03 Anzac Day - Ramsgate Avenue and Campbell Parade, North Bondi - Temporary Road Closure (A19/0394)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Approves the Traffic Control Plans attached to the report for the temporary closure of Ramsgate Avenue and Campbell Parade, North Bondi, on 25 April 2022 between 4 am and 8 am, subject to the applicant:
 - (a) Submitting a Traffic Management Plan to Transport for NSW for approval.
 - (b) Providing public liability insurance for the event.
 - (c) Obtaining NSW Police Force approval and assessment of the event classification.
 - (d) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue (Bondi, Woollahra, and Randwick fire stations) at least seven days prior to the event.
 - (e) Notifying local residents and businesses at least seven days prior to the event.
 - (f) Using traffic controllers accredited by Transport for NSW to regulate traffic.
 - (g) Covering all costs associated with traffic control.
 - (h) Submitting a copy of the approved road occupancy licence to the Executive Manager,

Infrastructure Services, prior to the event taking place.

2. Delegates authority to Executive Manager, Infrastructure Services, to modify the Traffic Control Plans should on-site circumstances warrant changes.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.02/22.03 Oceanview Avenue east of Old South Head Road, Vaucluse - Double Centre (BB) Line Marking (A03/0042-04)

COUNCIL OFFICER'S PROPOSAL:

That Council installs 10 metres of double centre (BB) line marking in Oceanview Avenue east of Old South Head Road, Vaucluse, as shown in Figure 1 of the report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.03/22.03 38 and 40 Roscoe Street, Bondi Beach - 'P Motor Bikes Only' Parking Zone (SF22/504)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' zone in the kerbside lane between the driveways of 38 and 40 Roscoe Street, Bondi Beach.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zones, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.04/22.03 5 Strickland Street, Rose Bay - 'P Motor Bikes Only' Parking Zone (SF22/496)

COUNCIL OFFICER'S PROPOSAL:

That Council installs a 'P Motor Bikes Only' parking zone between the driveways of 3A and 5 Strickland Street, Rose Bay.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.05/22.03 203 Military Road, Dover Heights - 'P Motor Bikes Only' Zone and 'No Stopping' Zone (SF22/952)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' parking zone between the driveways of 203 and 205 Military Road, Dover Heights.
- 2. Reduces the length of the 28.5 metre 'No Stopping' zone in front of 199, 201 and 203 Military Road to 10 metres.
- 3. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.06/22.03 82 Ramsgate Avenue, Bondi Beach - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs an 8 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 82 Ramsgate Avenue, Bondi Beach.
- 2. Removes the '2P 8 am–10 pm Permit Holders Excepted Area 6' (left and right) sign in front of 82 Ramsgate Avenue for the period during which the construction zone is used.
- 3. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being

installed.

4. 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: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/V.07/22.03 10 Hastings Parade, North Bondi - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 10 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 10 Hastings Parade, North Bondi.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. 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: NSW Police representative, TfNSW representative and Waverley Council representative (Chair).

TC/CV ELECTORATES OF COOGEE AND VAUCLUSE

TC/CV.01/22.03 Guide for On-street Mobility Parking Spaces (A20/0534)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Endorses the process outlined in the report for the assessment of on-street mobility parking applications.
- 2. Endorses the Guide for On-street Mobility Parking Spaces in the Waverley Local Government Area attached to the report.
- 3. Publishes the guide on Council's website.

4. Delegates authority to Executive Manager, Infrastructure Services, to modify the assessment process or guide.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted subject to the deletion of clause 1, amendments to clauses 2 and 4 and the addition of a new clause such that the recommendation now reads as follows:

That Council:

- 1. Endorses the Guide for On-street Mobility Parking Spaces in the Waverley Local Government Area attached to the report subject to steps 2 and 3 in the process (on page 3 of the Guide) being amended to read as follows:
 - (a) Step 2: 'The application is assessed by a Council officer. The Council officer may contact the applicant for more details. A site inspection and review of on-street parking demands is performed.'
 - (b) Step 3: 'A report is prepared for the Waverley Traffic Committee if the application satisfies the eligibility criteria. If the criteria are not satisfied, the applicant is notified.'
- 2. Publishes the guide on Council's website.
- 3. Delegates authority to Executive Manager, Infrastructure Services, to modify the guide.
- 4. Officers conduct a review of on-street Mobility Parking spaces as it could apply to carers, such as where the applicant does not have off-street parking and does not have a vehicle registered to the subject address, and prepare a report for the Traffic Committee's consideration.

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

TC/CV.02/22.03 Craig Avenue, Trafalgar Street, Castlefield Street and Calga Place - Electric Vehicle Charging Stations (A17/0477)

COUNCIL OFFICER'S PROPOSAL:

That Council installs a single 'No Parking Electric Vehicles Excepted Only While Charging' parking zone and associated equipment at each of the following locations:

- 1. The eastern side of Craig Avenue, east of Diamond Bay Road, Vaucluse.
- 2. The southern side of Trafalgar Street, south of Pembroke Street, Bronte.
- 3. The eastern side of Castlefield Street, outside 15 Castlefield Street, Bondi.
- 4. The eastern side of Calga Place, south of Macpherson Street, Bronte.

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).

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 ELECTORATES OF COOGEE AND VAUCLUSE

Nil.

THE MEETING CLOSED AT 11.04 AM.

SIGNED AND CONFIRMED MAYOR 12 APRIL 2022

REPORT TC/C.01/22.04

Subject:

TRIM No:

Author:

Birrell Street, Waverley - Cycleway	
A18/0579	WAVERLEY
Malik Almuhanna, Senior Traffic Engineer Calum Hutcheson, Service Manager, Traffic and Transport Clint Yabuka, Manager, Strategic Transport	

COUNCIL OFFICER'S PROPOSAL:

That Council:

Authoriser:

- 1. Approves the cycleway design for Birrell Street, Waverley, attached to the report.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

Dan Joannides, Executive Manager, Infrastructure Services

3. Delegates authority to the Executive Manager, Infrastructure Services, in consultation with Transport for NSW to modify the design to locate the parking lane against the kerb and the bicycle path between the parking and travel lanes.

1. Executive Summary

This report seeks endorsement of the design of a new cycle path in Birrell Street between Bronte Road and Henrietta Street, Waverly (see Figure 1).

The new cycleway design will place the cycleway adjacent to the footpath with a separation kerb between the cycle path and parked cars. This is part of a package of treatments improving safety for cyclists. The project is jointly funded between Transport for NSW (TfNSW) and Council.

Delegation of authority to the Executive Manager, Infrastructure Services, to modify the designs should onsite circumstances warrant changes is also proposed. This is extended to include delegated authority to the Executive Manager, Infrastructure Services in consultation with TfNSW to modify the design to locate the parking lane against the kerb and the bicycle path between the parking and travel lanes.

Council will need to exercise its delegated functions to implement the proposal.

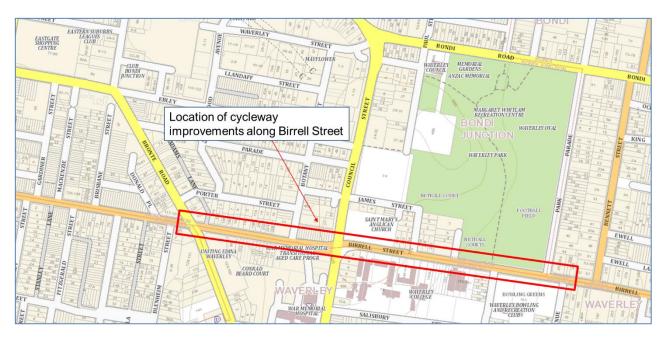


Figure 1. Location of cycleway improvements.

2. Introduction/Background

The line marking treatments presented in this report are a subset of other traffic control devices being considered by Council to assist in enforcing a 40 km/h speed limit on local roads in the southern part of the Waverley local government area. Contracting for installation of the devices will be undertaken once a package of works is finalised. This will comprise devices recommended for approval by a number of traffic committee meetings.

3. Technical Analysis

Birrell Street is undulating with a high point at the signalised pedestrian crossing outside Waverley College, it is uphill from both Bronte Road and Henrietta Street to the pedestrian crossing. The design incorporates a separated uphill bike path and bicycles travelling downhill will be mixed with general traffic.

This is appropriate as bicycles are able to travel at vehicle speeds downhill; however, this is not possible for the majority of bike riders when travelling uphill.

The separated bike path is next to the kerb and separated from parked vehicles with intermittent kerb blisters where possible. This arrangement improves the safety of cyclists more than a marked bike lane between the parking and travel lanes as it minimises conflict with vehicles when there is the greatest differential speed and removes bicycles that are travelling uphill from potential conflict with vehicles, improving the environment for those driving and riding.

The width of the uphill bicycle path is 1.6 metres including the buffer from parked vehicles. As this is an uphill, the speed of bicycles is expected to be slow at around 15 km/h. Transport for NSW Bicycle Design Toolbox provides guidance for a minimum one-way path width of 1.5 metres and Austroads Part 6A Section 5.1.5 advises an absolute minimum width of 1.2 metres. This minimum width is appropriate due to the slow uphill bicycle speed.

The buffer proposed is 0.4 metres between the bicycle path and the parking lane. This is typical for a separated two-way bike path next to a parking lane and it is also appropriate in this context as bicycle speeds will be slow in the uphill bike path that is next to a parking lane. The 0.4 metre buffer will incorporate a 0.2 metre wide kerb against the parking lane and a line-marked 0.2 metre separation against the bike path providing an effective 1.4 metre bike path.

Figure 2 shows a sample cross section showing the existing and proposed arrangements.

	Existing arrangement			
Birrell St	reet, Eastbound			Birrell Street, Westbound
Footpath	Parking / travel Lane 3.2m wide	3.5m Travel I	Lane	
	New arrangement			
Birrell St	reet, Eastbound			Birrell Street, Westbound
Footpath	1.2m 0.2m 0.2m Bike path linemarking kerb blist		3m Travel Lane	

Figure 2. Cross section of existing and proposed arrangements.

Improvements

The proposed bicycle lane works include the following changes:

• New 1.6 metre wide bicycle lane eastbound (uphill) and bicycle logos westbound (downhill) at Birrell Street east of Bronte Road.

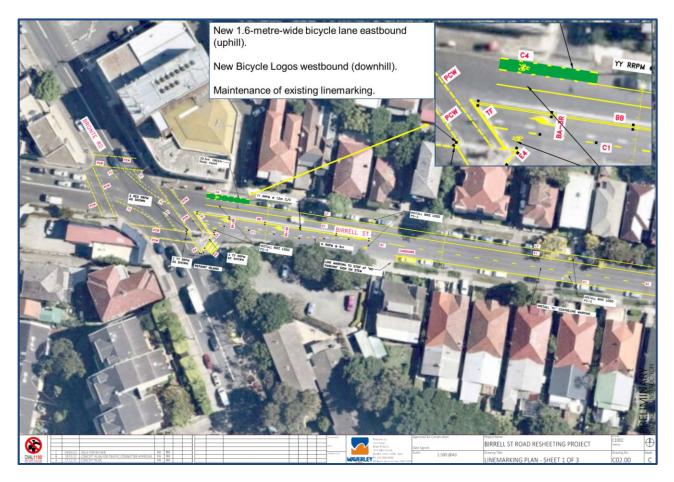


Figure 3. Line marking plan along Birrell Street east of Bronte Road.

• New 1.6 metre wide bicycle lane eastbound (uphill) and bicycle logos westbound (downhill) at Birrell Street west of Carrington Road.

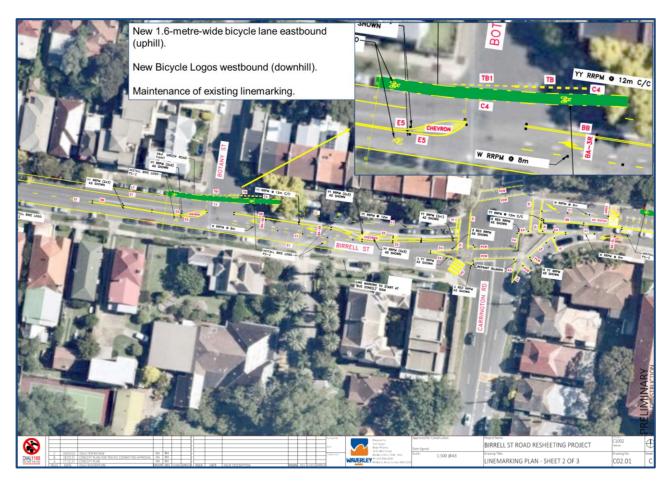


Figure 4. Line marking plan along Birrell Street west of Carrington Road.

- New 1.6 metre wide bicycle lane eastbound (uphill) and bicycle logos westbound (downhill) at Birrell Street west of Goldie Avenue. This will also include removal of existing 40 metre 'No Stopping, 7 am–9 am and 4 pm–6 pm Mon–Fri' restriction, as it will no longer be required.
- New 1.6 metre wide bicycle lane westbound (uphill) and bicycle logos eastbound (downhill) at Birrell Street west of Goldie Avenue.

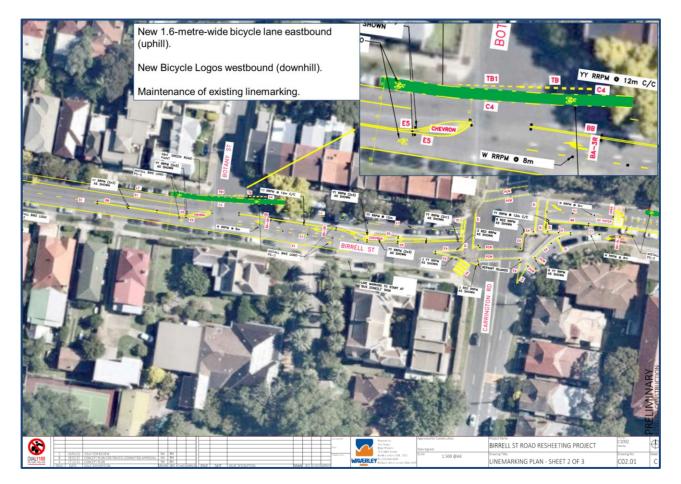


Figure 5. Line marking plan along Birrell Street east of Carrington Road.

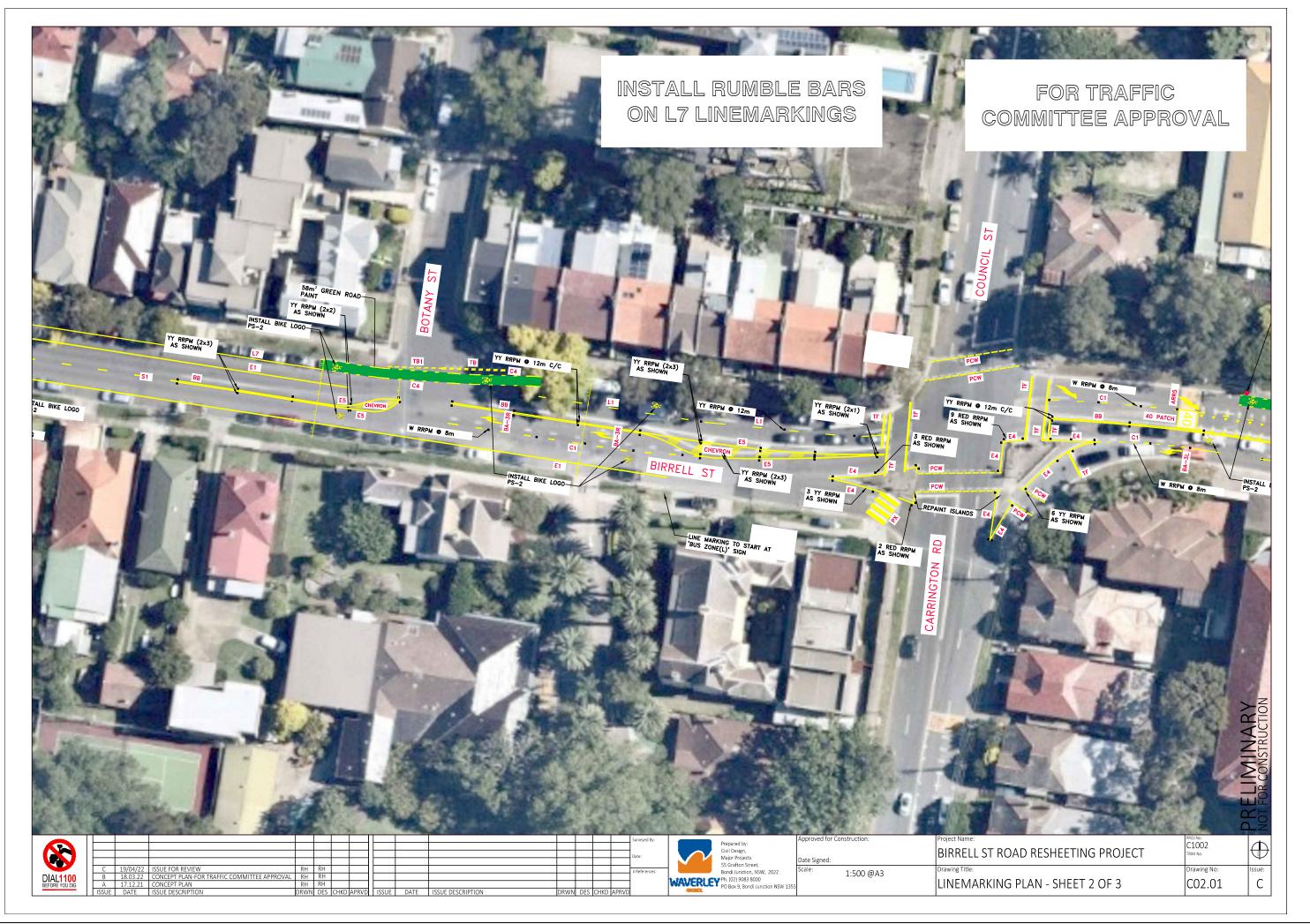
4. Financial Information for Council's Consideration

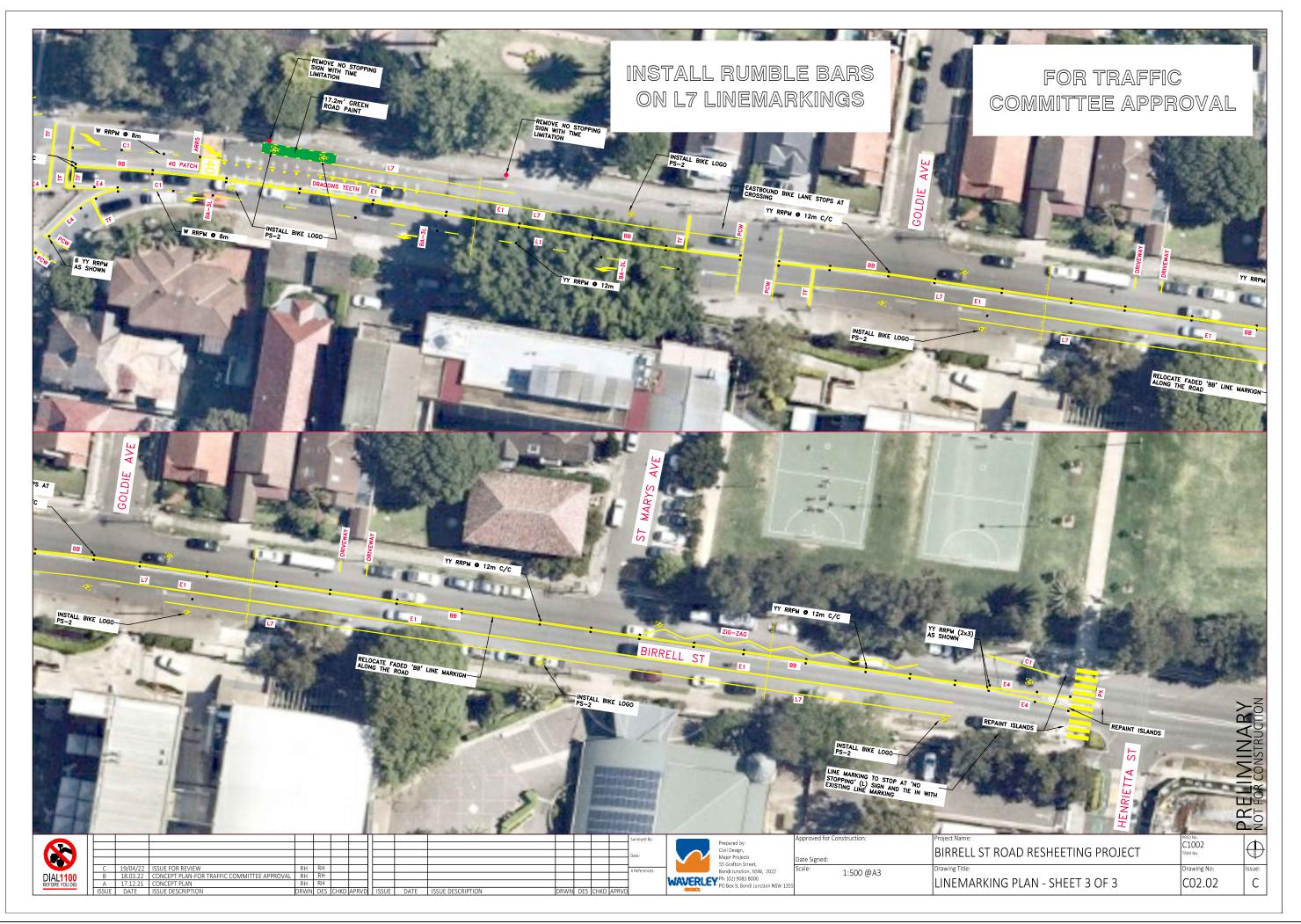
The project will be funded under a joint regional roads program (Council and TfNSW).

5. Attachments

1. Birrell Street (Henrietta Street-Bronte Road) - Line marking plan - Rev C 😃







REPORT TC/C.02/22.04

Subject:

Bronte Road, Waverley - Pick-Up/Drop-Off (PUDO) Bay	
A20/0336	WAVERLEY

TRIM No:	A20/0336	WAV
Author:	Paul Cai, Traffic Engineer Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	i

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 5.7 metre pick-up/drop-off (PUDO) bay, 6 pm–3 am, on the eastern side of Bronte Road outside 244–246 Bronte Road, Waverley.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of the PUDO bay, as necessary.

1. Executive Summary

Council has received requests to consider providing pick-up and drop-off facilities near Charing Cross for the customers of the hotels and clubs near the area at night. Drivers currently pick up and drop off passengers at random locations along Carrington Road and Bronte Road. This has resulted in illegal parking and noise issues for residents in Carrington Road south of the intersection.

It is recommended that a 2 minute pick-up/drop-off (PUDO) bay is installed in Bronte Road.

Two potential locations for the PUDO bay were investigated:

- Option 1 6.7 metre PUDO bay (6 pm–3 am) on the western side of Bronte Road, outside the Eastern Suburbs Legion Club, as shown in Figure 2.
- Option 2 5.7 metre PUDO bay (6 pm–3 am) on the eastern side of Bronte Road, outside 244–246 Bronte Road, Waverley, as shown in Figure 3.

Option 2 location is recommended by officers. This location is easier to be accessed by drivers (Uber, Ola, taxis, family members, friends, etc.) as most are likely to be coming from the north.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Options for PUDO bay locations.

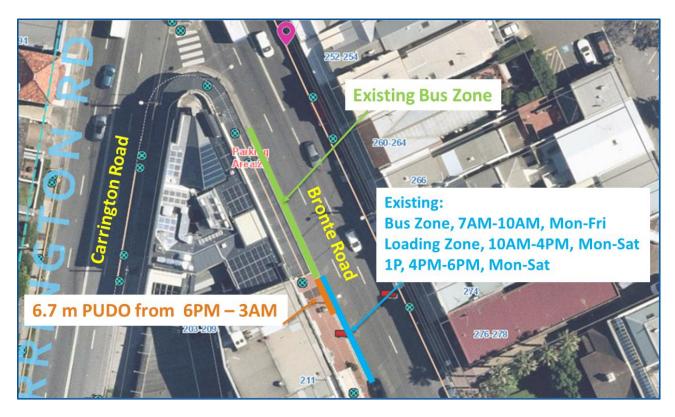


Figure 2. Option 1 location for the proposed PUDO bay.

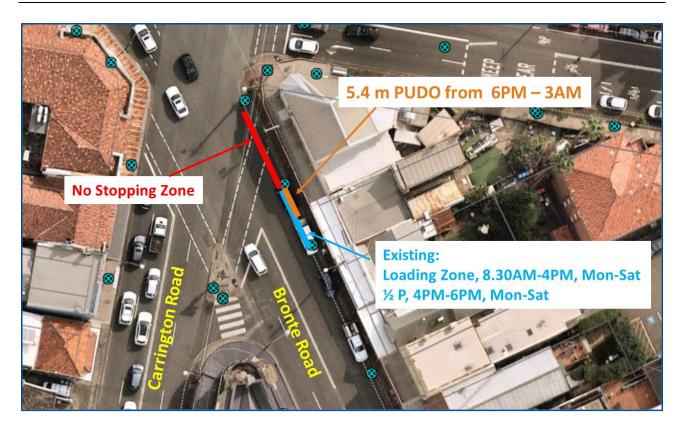


Figure 3. Option 2 location for the proposed PUDO bay.

2. Introduction/Background

PUDO bays installed in Waverley have proven to be beneficial for community access to ride share services, taxis and friends. Ride share services are now using the bays as pick-up locations and the majority of ride share journeys also end at these locations. Installation of the PUDO bays have put together the scattered pick-up and drop-off activities to one dedicated location, thereby minimising the impacts on parking and other traffic in the area.

The hotels and clubs in the vicinity of Charing Cross generate a demand for pick-up at night. There is no existing dedicated pick-up and drop-off facility near the area.

A PUDO bay, 6 pm–3 am, is proposed to facilitate pick-up and drop-off activities at night.

3. Technical Analysis

Options

Two potential PUDO bay locations were investigated by Council officers:

• Option 1 – On the western side of Bronte Road, outside the Eastern Suburbs Legion Club.

Option 1 is located adjacent to the existing bus zone outside The Robin Hood Hotel. Kerbside parking in this area is unrestricted between 6 pm and 7 am.

The kerbside parking space will be an intermediate space. Length required for the PUDO bay in this location is 6.7 metres for quick access.

This location is convenient for customers of The Robin Hood Hotel and the Eastern Suburbs Legion Club. However, it may not be easily seen by customers of The Charing Cross Hotel.

• Option 2 – On the eastern side of Bronte Road, outside 244–246 Bronte Road, Waverley.

Option 2 located adjacent to the southern end of the No Stopping zone near the intersection. Kerbside parking control in this area is unrestricted between 6 pm and 8.30 am.

The length required for this PUDO bay is 5.4 metres. Drivers can use the 'No Stopping' zone for draw in.

This location is easier to for access by drivers as most are expected to come from the north. It can also be easily seen by customers of the hotels and clubs near Charing Cross.

Pick-up/drop-off signage and line marking

Figure 4 shows the signage and line marking to be installed for the proposed PUDO bay in Bronte Road, Waverley.

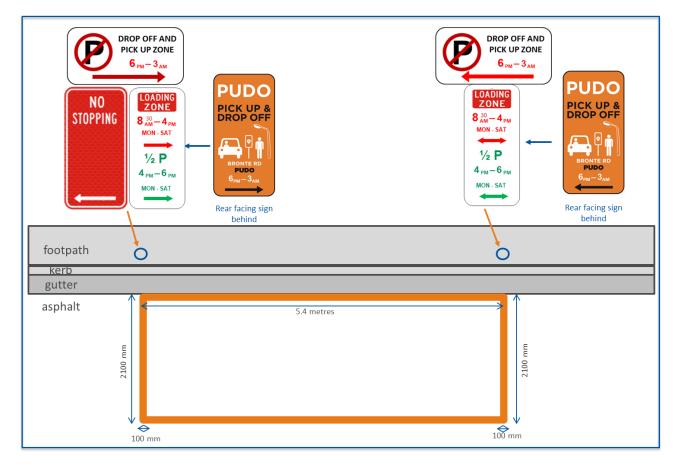


Figure 4. PUDO Bay signage and line-marking.

4. Financial Information for Council's Consideration

Council will meet the cost of sign installation and line-marking from existing budgets.

5. Attachments

Nil.

REPORT TC/C.03/22.04

Subject:	22 Cross Street, Bronte - Construction Zone	
TRIM No:	A03/2514-04	WAVERLEY
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9.7 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 22 Cross Street, Bronte.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. 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 associated with a development at 22 Cross Street, Bronte, for the installation of a construction zone in Cross Street.

Council officers propose the installation of a 9.7 metre construction zone on the eastern side of Cross Street in front of 22 Cross Street.

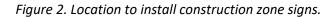
Figure 1 shows the site location. Figure 2 shows the proposed construction zone.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Site location.

No. 20 No. 20 No. 22 No. 22 O.7 metre construction zone	
Cross Street	



2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is sign posted 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply the applicant 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.

3. Technical Analysis

The subject site has a frontage of 10 metres on the eastern side of Cross Street. The applicant has requested a 5 metre construction zone. Council officers propose to install a 9.7 metre construction zone in front of 22 Cross Street, Bronte. Figure 3 shows the existing and recommended parking allocation in Cross Street.

The 9.7 metres covers most of the 10 metre property frontage leaving 5 metres to accommodate a single car between the construction zone and a 'No Stopping' zone outside 24 Cross Street.

Site frontage	22 Cross Street 10 metres				24 Cross Street 10 metres	
Parking currently available	22 Cross Street driveway 5.6 metres	Unrestricted parking 9.1 metres		No Stopping zone		
Parking available with construction	Proposed construction zone 9.7 metres		Unrestricted parking 5 metres	No Stopping zone		

Figure 3. Parking controls.

Table 1. App	lication d	details.
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Applicant	Justine Brant
Development application	DA-332/2017
Works	First floor addition to dwelling
Approved hours of construction	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
Frontage/Rear length	10 metres
Road	Cross Street
Existing parking	Unrestricted parallel parking
Length requested by applicant	5 metres
Length to be signposted	9.7 metres
Planned duration	12 months
Fee area	Low density residential zoning

Signage

The proposed signage is shown in Figure 4.

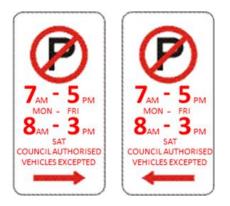


Figure 4. Proposed signage.

Notification

Businesses and residents in the vicinity of the construction zone will be notified prior to it being installed. Figure 5 shows the properties to be notified about the construction zone.



Figure 5. Notification area (red).

4. Financial Information for Council's Consideration

The estimated fees for the construction zone are shown in Table 2.

Table 2. Estimated weekly fees.

Category	Unit	Number/ Dimensions	Rate (GST Exempt)	Fee
Fee (Areas zoned low, medium, or high density residential) - Parallel parking - Angle parking	per metre per week	9.7 metres	\$70.00 \$139.00	\$679.00
Fee (Areas zoned neighbourhood centre, commercial core, or mixed use)	per metre		¥200.00	
- Parallel parking - Angle parking	per week	-	\$97.00 \$190.00	-
Occupation of metered parking spaces (in addition to the above fees)	per space per week	-	\$387.00	-
			Weekly Fee	\$679.00

5. Attachments

Nil.

REPORT TC/V.01/22.04

Subject:	Murriverie Road, North Bondi - Bus Zone Modification and 'P Disability Only' Parking Zone	d WAVERLEY
TRIM No:	A20/0534	COUNCIL
Author:	Beryl Wang, Professional Engineer, Traffic and Developmer Calum Hutcheson, Service Manager, Traffic and Transport Paul Cai, Traffic Engineer	nt
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Reduces the length of the bus zone outside 38, 40 and 42 Murriverie Road, North Bondi, from 30 metres to 20 metres.
- 2. Installs a 5.4 metre 'P Disability Only' parking zone in front of 42 and 44 Murriverie Road, North Bondi, and removes the 'P Disability Only' parking zone in front of 53 Murriverie Road.

1. Executive Summary

At its meeting on 15 February 2022, Council deferred a Traffic Committee item for an on-site meeting between Council officers, residents and Councillors. The item related to a recommendation to reduce the length of the bus zone outside 38, 40 and 42 Murriverie Road, North Bondi, from 30 metres to 20 metres, as shown in Figure 1.

An on-site meeting was held on 19 April 2022 between the Council officers, Cr Betts, Cr Kay and the residents of 40, 42 (by phone) and 55 Murriverie Road. It resulted in an agreement that the original recommendation of the Traffic Committee should be supported.

With the bus zone length being reduced, it is proposed that the approved 'P Disability Only' zone in front of 53 Murriverie Road is to be relocated to in front of 42 and 44 Murriverie Road. This is because the approved location cannot be signposted due to tree roots preventing the installation of a signpost. The locations of the existing 'P Disability Only' zone and proposed 'P Disability Only' zone is shown in Figure 2.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Proposed 20 metres bus zone.



Figure 2. Location of existing 4.5 metre 'P Disability Only' zone and proposed 5.4 metre 'P Disability Only' zone.

2. Introduction/Background

An on-site meeting between Council officers, the residents of 40, 42 (by phone) and 55 Murriverie Road, North Bondi, and Crs Betts and Kay was held on 19 April 2022. It is agreed by all parties to support the original Traffic Committee recommendation (TC/V.01/22.01) to reduce the length of the bus zone outside 38, 40 and 42 Murriverie Road.

Council has received a request from a resident for a disability parking space at 55 Murriverie Road, North Bondi. The request was assessed and reported to the Traffic Committee in May 2021. The Traffic Committee recommended the installation of a 'P Disability Only' zone. It was installed adjacent to the driveway to 53 Murriverie Road, North Bondi, due to school bus stop occupying the frontage of 55 Murriverie Road, North Bondi.

The length of the previous 'Disability Parking' space is only 4.5 metres due to tree roots in front of 53 Murriverie Road. The length does not satisfy the requirement for on-street disability parking spaces. It is

recommended that Council installs this disability parking on the north side Murriverie Road to satisfy the length requirement.

3. Technical Analysis

Figure 3 shows the approved 4.5 metre 'P Disability Only' zone in front of 53 Murriverie Road, North Bondi.

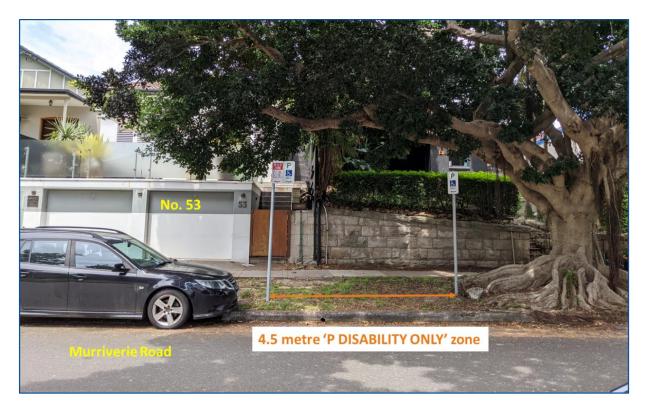


Figure 3. Approved 4.5 metre 'P Disability Only' zone in front of 53 Murriverie Road, North Bondi.

The proposed 'P Disability Only' zone will start from the driveway splay of 42 Murriverie Road, North Bondi and extend eastwards for 5.4 metres. Figure 4 shows the proposed location. The bus zone sign and J-pole will be relocated as a result of the reduced bus zone length.



Figure 4. Proposed 'P Disability Only' Zone and changes in bus zone signs.

The proposed length of 5.4 metres is based on Australian Standard AS2890.5-2020 – On-street Parking, as shown in Figure 5 below.

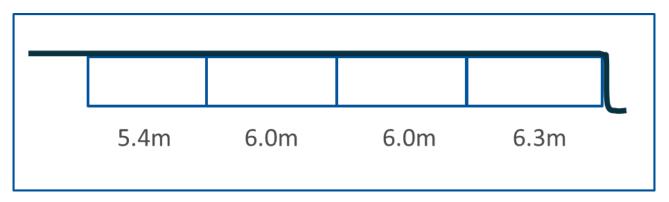


Figure 5. Dimensions for on-street disability parking spaces.

4. Financial Information for Council's Consideration

Council will supply and install the signs and remove existing signs with funds from existing budgets.

5. Attachments

REPORT TC/V.02/22.04

Subject:	Chaleyer Street and Hardy Street Intersection, Rose	
	Bay/Dover Heights - 'No Stopping' Zones	WAVERLEY
TRIM No:	A14/0145	COUNCIL
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Service	S

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9.2 metre 'No Stopping' zone on the northern side of Chaleyer Street, west of Hardy Street, Rose Bay/Dover Heights.
- 2. Installs a 9.2 metre 'No Stopping' zone on the southern side of Chaleyer Street, west of Hardy Street, Rose Bay/Dover Heights.
- 3. Installs a 10 metre 'No Stopping' zone on the western side of Hardy Street, north of Chaleyer Street, Rose Bay/Dover Heights.

1. Executive Summary

Council has received representations to review parking controls at the intersection of Chaleyer Street and Hardy Street, Rose Bay/Dover Heights. Figure 1 shows the site location.

Cars are parked within the statutory 'No Stopping' area at this intersection. This can reduce visibility for drivers turning at the intersection of Chaleyer Street and Hardy Street.

Council officers recommend installing a 9.2 metre 'No Stopping' zones on the northern and southern side of Chaleyer Street west of Hardy Street, and a 10 metre 'No Stopping' zone on the western side of Hardy Street north of Chaleyer Street.

Residents in the immediate vicinity were surveyed. One submission was received from a resident objecting to 10 metres of 'No Stopping' infringing into on street parking. This has been addressed by reducing the 10 metres statutory distance to 9.2 metres signposted.

The 9.2 metre 'No Stopping' zones maximise on street parking. They do not impede waste vehicle access.

Council will need to exercise its delegated functions to implement the proposal.

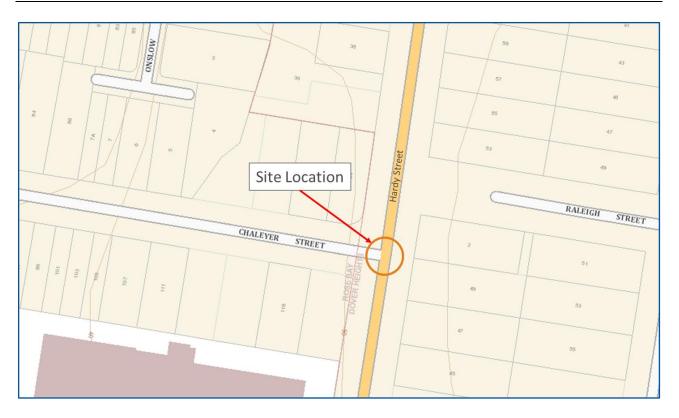


Figure 1. Site location.

2. Introduction/Background

Council has received representations to review parking controls at the intersection of Chaleyer Street and Hardy Street, Rose Bay/Dover Heights.

The statutory 10 metres of 'No Stopping' is not currently signposted.

A resident in Chaleyer Street has expressed concerns about loss of street parking caused by the installation of 'No Stopping' zone at the intersection

3. Technical Analysis

Compliance with Transport for NSW checklist

An assessment of the reduction of the 10 metre 'No Stopping' distance at the intersection has been completed in accordance with Transport for NSW (TfNSW) Technical Direction TTD 2014/005 'Statutory 10 m 'No Stopping' at unsignalised intersections review checklist.' The TfNSW checklist has been completed (see Table 1).

Table 1. Assessment checklist for reviewing the statutory 'No Stopping' distance at unsignalised intersections.

Site: Chaleyer Street and Hardy St	reet, Ro	se Bay	/Dover Heights
Traffic Committee: April 2022	Da	te of a	ssessment: 7 April 2022
Name: Beryl Wang			
	Yes	No	Comment
Crossing Sight Distance			Chaleyer Street from the southern side:
	V		- 35.6 metres required
			- 43.5 metres available
			Currently OK with car parked 10 metres from the
			intersection (see Figure 3)
Minimum Gap Sight Distance			Hardy Street southbound:
(stopping sight distance)	V		- 28 metres required
			- More than 40 metres available
			Hardy Street northbound:
			- 10 metres required
			- 15 metres available
Turning paths			Can accommodate Council's waste vehicles with a 9.2
	v		metre 'No Stopping' zone (see Figures 4 and 5)
Public transport	N/A		-
Emergency vehicle access	V		ОК
Angle parking manoeuvres	N/A		-

The critical factor in determining 'No Stopping' requirements for this location is the crossing sight distance. The crossing sight distance (CSD) is the minimum distance a pedestrian requires in order to safely cross the road (see Figure 2).

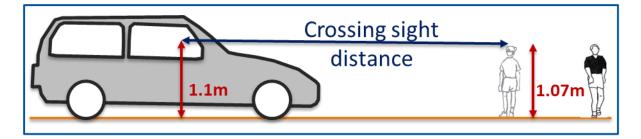


Figure 2. Crossing sight distances.

Traffic speeds on Hardy Street on the approach to the intersection are around 40 km/h (mid-block). The available crossing sight distance is shown in Figure 3.



Figure 3. Crossing sight distance.

Council waste vehicle access requirements

Council waste vehicles are around 10 metres long (9 metres for the truck itself, plus 1 metre for the scoop added to the rear). These long vehicles require more room to manoeuvre at local road intersections than general traffic.

The swept path of a waste truck turning from Hardy Street to Chaleyer Street at a turning speed of 0–5 km/h is shown in Figures 4 and 5. The swept path diagram is from Austroads for 8.8 medium rigid vehicles. It is similar to the swept path of a Council waste vehicle.

The swept paths show that a 9.2 metre 'No Stopping' zone does not impede access for a waste vehicle to enter Chaleyer Street.



Figure 4. Council waste vehicle turning path – Northbound.

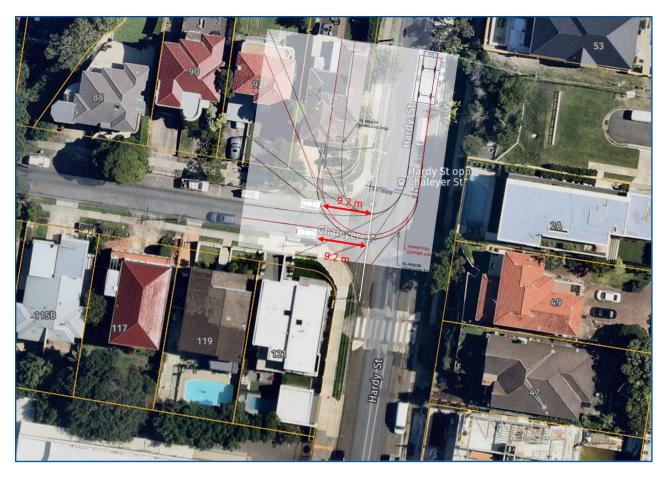


Figure 5. Council waste vehicle turning path – Southbound.

4. Financial Information for Council's Consideration

Council will meet the cost of sign installation from existing budgets.

5. Attachments

REPORT TC/V

TC/V.03/22.04		
Subject:	4 Bonus Street, North Bondi - 'P Disability Only' Parking	
-	Zone - Removal	WAVERLEY
TRIM No:	A20/0534	COUNCIL
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	nt
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	i

COUNCIL OFFICER'S PROPOSAL:

That Council removes the 6 metre 'P Disability Only' parking zone outside 4 Bonus Street, North Bondi.

1. **Executive Summary**

The resident at 4 Bonus Street has requested that Council removes the existing 'P Disability Only' zone in front of the property. Council has confirmed that the space is no longer required. Removal of the 'P Disability Only' zone is recommended.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Existing location of 'P Disability Only' zone outside 4 Bonus Street.

2. Introduction/Background

The disability parking space outside 4 Bonus Street was approved by Waverley Traffic Committee on 22 May 2014.

3. Technical Analysis

Removal of the 'P Disability Parking' zone will result in unrestricted parking for one vehicle.



Figure 2. Proposed removal of existing 'P Disability Only' zone.

4. Financial Information for Council's Consideration

Council will fund the works from existing budgets.

5. Attachments

REPORT TC/V.04/22.04		
Subject:	10 and 12 Wairoa Avenue, North Bondi - 'P Motor Bikes Only' Parking Zone	WAVERLEY
TRIM No:	SF22/1343	COUNCIL
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	nt
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' parking zone in the kerbside lane between the driveways of 10 and 12 Wairoa Avenue, North Bondi.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zone, as necessary.

1. Executive Summary

Council has received a request to consider restricting car parking in the gap between the driveways of 10 and 12 Wairoa Avenue, North Bondi. The request arose due to the distances between two driveways not being long enough to accommodate most cars.

The existing street parking for Wairoa Avenue is unrestricted.

47 residents were surveyed by letterbox drop about whether they supported motor bike parking between the two driveways. No submissions were received in objection to the proposed motor bike parking.

Council proposes to install 'P Motor Bikes Only' zone between the driveways of 10 and 12 Wairoa Avenue.

Figure 1 shows the location of the site. Figure 2 shows the proposed signage for the 'P Motor Bikes Only' zone.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Site location.



Figure 2. Proposed signage for the 'P Motor Bikes Only' zone.

2. Introduction/Background

Council has investigated introduction of motor bike parking between the driveways of 10 and 12 Wairoa Avenue. A small car parked between the driveways can potentially block access to the driveways.

3. Technical Analysis

Austroads guidelines and Council resolutions support the use of motor bike parking spaces in circumstances where the gaps between two driveways are too narrow to accommodate a car.

Austroads' Guide to Traffic Management – Part 11: Parking (section 7.8.3) states that motor bike parking provision can be achieved by using under-sized parking spaces. The Traffic Committee and Council have supported this principle and have previously been in favour of installing 'P Motor Bikes Only' zones in short sections of kerb where other vehicles would obstruct vehicular access.

Warrants

At its meeting in June 2021, Council endorsed guidelines for installing motor bike parking zones between driveways. The criteria for installing a 'P Motor Bike Only' zone are as follows:

1. Distance check.

4.2 metres has been adopted as the maximum distance between driveway spaces for motorbike parking to be considered. The distance between the driveways of 10 and 12 Wairoa Avenue is 3.6 metres. The distance check is satisfied.

2. Motor bike parking demand check.

A site visit was conducted on 11 January 2022. More than 90% of the kerb-side parking on Wairoa Avenue was occupied. The high demands will result in cars being parked in the narrow gaps between the driveways from time to time.

3. Resident views check.

47 properties near the site were surveyed by letterbox drop for the proposal of installing motor bikes parking zone between the driveways of 10 and 12 Wairoa Avenue.

No objections to the proposed motor bikes only parking zone were received. The proposed motor bikes only parking zone will have no impact on on-street parking for cars.

Signage

The proposed signage is shown in Figure 3.

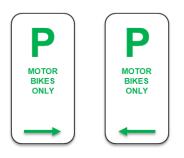


Figure 3. Proposed signage.

4. Financial Information for Council's Consideration

Council will fund the cost of installing the signs if the 'P Motor Bikes Only' zone is approved.

5. Attachments

REPORT TC/V.05/22.04		
Subject:	11 and 13 Napier Street, Dover Heights - 'P Motor Bikes Only' Parking Zone	WAVERLEY
TRIM No:	A21/0065	COUNCIL
Author:	Malik Almuhanna, Senior Traffic Engineer	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 'P Motor Bikes Only' parking zone in the kerbside lane between the driveways of 11 and 13 Napier Street, Dover Heights, set back 900 mm from the driveways.
- 2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the 'P Motor Bikes Only' parking zone, as necessary.

1. Executive Summary

Council has received a request to consider restricting car parking in the gap between the driveways of 11 and 13 Napier Street, Dover Heights.

Parking is currently unrestricted in Napier Street. The location of the site is shown in Figure 1. A driveway test was undertaken and is shown in Figure 2 of this report.

The motor bike parking zone signs are setback 900 mm from the ends of the driveways to facilitate access to the car parking area at this address. The proposed signage for the motor bike parking zone is shown in Figure 3.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Site location.

2. Introduction/Background

Council has received a request to consider restricting car parking in the gap between the driveways of 11 and 13 Napier Street, Dover Heights.

Council's Executive Manager, Infrastructure Services, and a Councillor have met with residents on-site, and it was determined that a 'P Motor Bike Zone' restriction will be considered by the Traffic Committee.

3. Technical Analysis

Austroads guidelines and Council resolutions support the use of motor bike parking spaces in circumstances where the gaps between two driveways are too narrow to accommodate a car.

Austroads' Guide to Traffic Management – Part 11: Parking (section 7.8.3) states that motor bike parking provision can be achieved by using under-sized parking spaces. The Traffic Committee and Council have supported this principle and have previously been in favour of installing 'P Motor Bikes Only' zones in short sections of kerb where other vehicles would obstruct vehicular access.

Warrants

At its meeting in June 2021, Council endorsed guidelines for installing motor bike parking zones between driveways. The criteria for installing a 'P Motor Bike Only' zone are as follows:

1. Distance check

4.2 metres has been adopted as the maximum distance between driveway spaces for motorbike parking to be considered. The distance between the driveways of 13 and 11 Napier Street is 5.2 metres. The distance check is not satisfied.

2. Motor bike parking demand check

A site visit was conducted on 29 March 2022. More than 80% of the kerb-side parking was occupied. The high demands will result in cars being parked in the narrow gaps between the driveways from time to time. The demand check is satisfied.

3. Resident views check

A survey of residents was not undertaken. The survey check is not satisfied.

Driveway test

The proposed motor bikes only parking zone will have an impact on on-street parking for cars. A potential solution that can see the parking space retained and egress and ingress improved is wider driveway splays.

The current driveways at 11 and 13 Napier Street are 4 metres wide, including splays.

Council officers have undertaken a driveway test using a large Kia Sorento (4.81 metre long x 1.9 metre wide). Reversing out was not convenient. However, the driveway test was satisfactory (see Figure 2).

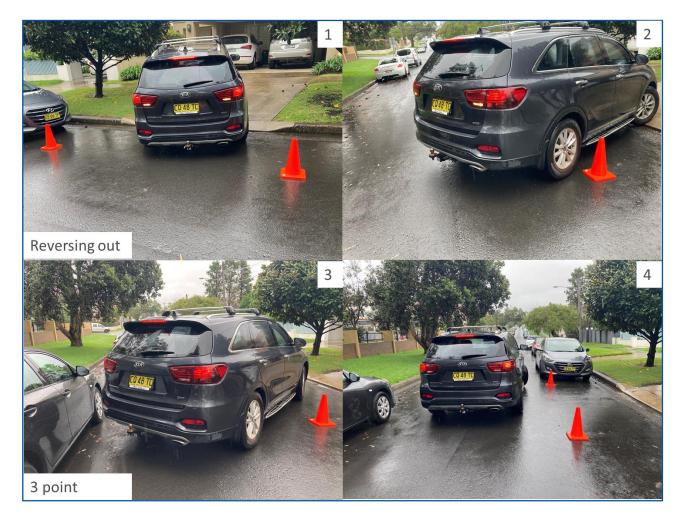


Figure 2. Driveway test.

Signage

The proposed signage is shown in Figure 3.

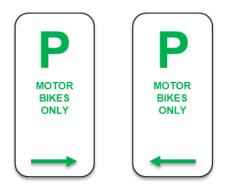


Figure 3. Proposed signage.

4. Financial Information for Council's Consideration

Council will fund the cost of installing the signs from existing budgets if the 'P Motor Bikes Only' zone is approved.

5. Attachments

REPORT TC/V.06/22.04

Subject:	79-103 Wellington Street, Bondi Beach - Construction Zone	WAVERLEY
TRIM No:	A03/2514-04	COUNCIL
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 20 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone in front of 95–103 Wellington Street, Bondi Beach.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. 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 associated with a development at 79-103 Wellington Street, Bondi Beach, for the installation of a 20 metre construction zone in Wellington Street.

Council officers propose the installation of a 20 metre construction zone on the southern side of Wellington Street in front of 95–103 Wellington Street, Bondi Beach.

Figure 1 shows the site location. Figure 2 shows the proposed construction zone.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Site location.



Figure 2. Location to install construction zone signs.

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply the applicant 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.

3. Technical Analysis

The subject site has a frontage of 96 metres on the southern side of Wellington Street. The applicant has requested a 20 metre construction zone. Council officers propose to install a 20 metre construction zone. Figure 3 shows the existing and recommended parking allocation in Wellington Street.

Council officers propose to install the construction zone on the southern side of Wellington Street in front of 95–103 Wellington Street, Bondi Beach.

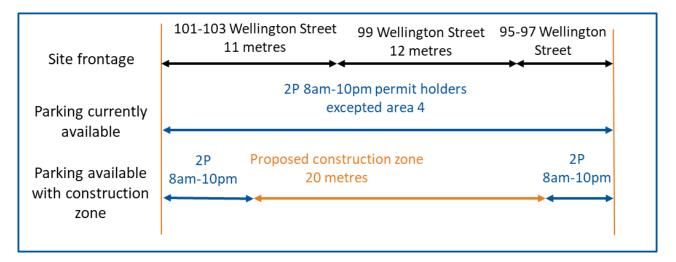


Figure 3. Parking controls.

Table 1. Application details.

Applicant	Vernon Houston
Development application	DA-268/2020
Works	Demolition of existing structure and construction of two four- storey residential flat buildings
Approved hours of construction	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
Frontage/Rear length	96 metres
Road	Wellington Street
Existing parking	2P 8 am–10 pm, Permit Holders Excepted Area 4
Length requested by applicant	20 metres
Length to be signposted	20 metres
Planned duration	2 years
Fee area	Medium-density residential zoning

Signage

The proposed signage shown in Figure 4.

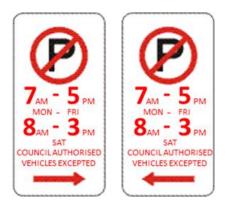


Figure 4. Proposed signage.

Notification

Businesses and residents in the vicinity of the construction zone will be notified prior to it being installed. Figure 5 shows the properties to be notified about the construction zone.



Figure 5. Notification area (red).

4. Financial Information for Council's Consideration

The estimated fees for the construction zone are shown in Table 2.

Table 2. Estimated weekly fees.

Category	Unit	Number/ Dimensions	Rate (GST Exempt)	Fee
Fee (Areas zoned low, medium, or high density residential) - Parallel parking - Angle parking	per metre per week	20 metres -	\$70.00 \$139.00	\$1,400.00
Fee (Areas zoned neighbourhood centre, commercial core, or mixed use)	per metre			
- Parallel parking - Angle parking	per week	-	\$97.00 \$190.00	-
Occupation of metered parking spaces (in addition to the above fees)	per space per week	-	\$387.00	-
			Weekly Fee	\$1,400.00

5. Attachments

REPORT TC/V.07/22.04

10, 1.07, 22.04		
Subject:	23 Curlewis Street, Bondi Beach - Construction Zone in Wellington Street	
	weinigton street	WAVERLEY
TRIM No:	A03/2514-04	COONCIC
Author:	Beryl Wang, Professional Engineer, Traffic and Developme Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 6 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles Excepted' construction zone south of 23 Curlewis Street in Wellington Street, Bondi Beach.
- 2. Requires the applicant to notify residents in the vicinity of the construction zone prior to it being installed.
- 3. 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 associated with a development at 23 Curlewis Street, Bondi Beach, for the installation of a construction zone in Wellington Street along the southern side of the property.

The minimum length of a construction zone stated in the Council guidelines for construction zones is 9 metres. Council has received a submission from a resident from 180 Wellington Street. The resident expressed concerns for wheelchair access from Wellington Street into 180 Wellington Street. This is currently available via a footpath connection from the street to the property. A 9 metre construction zone would block access to this connection.

Council officers propose the installation of a 6 metre construction zone in Wellington Street between an existing car share zone and the footpath.

Figure 1 shows the site location. Figure 2 shows the proposed construction zone.

Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Site location.



Figure 2. Location to install construction zone signs.

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Sat, Council Authorised Vehicles excepted' for the approved construction hours under the development consent. Council will then supply the applicant 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.

3. Technical Analysis

The subject site has a frontage of 16 metres on Wellington Street. The applicant has requested a 6 metre construction zone. Council officers propose to install a 6 metre constriction zone in Wellington Street.

The pedestrian path on the Western side of Wellington Street has two sets of stairs. The path connecting the western side of Wellington Street and 180 Wellington Street is required by a resident for wheelchair access. Figure 4 shows the constraints of the site.

Council officers propose to install the construction zone in Wellington Street, west of the existing car share parking space.

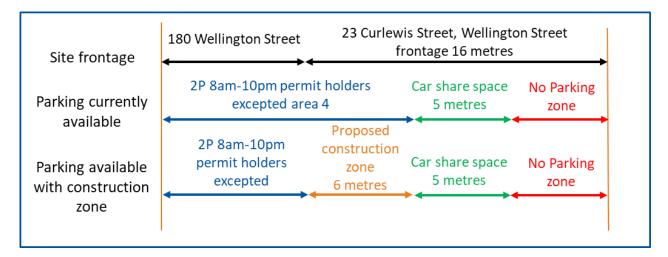


Figure 3. Parking controls.

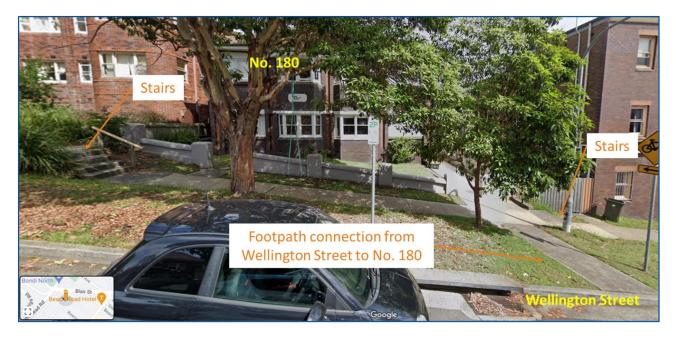


Figure 4. Constraints for resident access.

Table 1. Application details.

Applicant	Aaron Moran
Development application	DA-194/2020
Works	Alteration as to existing mixed-use building
Approved hours of construction	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
Frontage/Rear length	16 metres (northern side of Wellington Street)
Road	Wellington Street
Existing parking	2P 8 am–10 pm, Permit Holders Excepted Area 4
Length requested by applicant	6 metres
Length to be signposted	6 metres
Planned duration	26 weeks
Fee area	Medium-density residential zoning

Signage

The proposed signage in Figure 5.



Figure 5. Proposed signage.

Notification

Businesses and residents in the vicinity of the construction zone will be notified prior to it being installed. Figure 6 shows the properties to be notified about the construction zone.



Figure 6. Notification area (red).

4. Financial Information for Council's Consideration

The estimated fees for the construction zone are shown in Table 2.

Table 2. Estimated weekly fees.

Category	Unit	Number/ Dimensions	Rate (GST Exempt)	Fee
Fee (Areas zoned low, medium, or high density residential) - Parallel parking - Angle parking	per metre per week	6 metres -	\$70.00 \$139.00	\$420.00
Fee (Areas zoned neighbourhood centre, commercial core, or mixed use) - Parallel parking	per metre per week	-	\$97.00	-
- Angle parking Occupation of metered parking spaces (in addition to the above fees)	per space per week	-	\$190.00 \$387.00	-
	-	•	Weekly Fee	\$420.00

5. Attachments

REPORT TC/TEAV.01/22.04

Subject:	140 Clyde Street, North Bondi - Angle Parking and Passin	
	Bays	WAVERLEY
TRIM No:	DA-314/2021	COUNCIL
Author:	Calum Hutcheson, Service Manager, Traffic and Transport	
Authoriser:	Dan Joannides, Executive Manager, Infrastructure Services	5

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Should DA-314/2021 be approved with an increase in the number of childcare places from 27 to 43 at 140 Clyde Street, North Bondi:
 - (a) Angle parking will be required in Clyde Street in accordance with the concept plan contained in Figure 1 of the report. This is required to accommodate the parking demands associated with the 16 additional childcare places. Consent conditions should have the approval being contingent on 4 additional on-street parking spaces being provided.
 - (b) The proposed timed restrictions for 4 on-street parking spaces are supported subject to community consultation. Consent conditions should reflect this. The cost of installation is to be borne by the applicant if the restrictions are approved by Council.
 - (c) The proposed passing bays are supported. The locations and number of bays are to be subject to community consultation. Consent conditions should reflect this. The cost of installation is to be borne by the applicant if the restrictions are approved by Council.
- 2. Changes to the parking restrictions in the vicinity of the site will be subject to a separate report to the Traffic Committee should the development be approved. The proposal will be assessed on its merits at that time.

1. Executive Summary

This report seeks Traffic Committee technical advice in relation to a development application to increase the number of childcare places at an existing childcare centre at 140 Clyde Street, North Bondi. A traffic and parking assessment submitted by the applicant is attached.

Council received the development application in August 2021. It proposed increasing the number of childcare places from 27 to 49 (22 additional places). A deemed refusal appeal was subsequently lodged with the NSW Land and Environment Court in November 2021. Following a section 34 conference between the parties, the proposed increase in the number of childcare places was reduced to 16, resulting in 43 spaces in total.

The proposal relies on increased parking on-street to accommodate the increase in parking demands due to the additional childcare places. Angle parking is proposed in the wide section of Clyde Street in the vicinity

of the childcare centre (see Figure 1). One on-street parking space currently between the entrance and exit driveway of the childcare centre is proposed to be removed and replaced with 'No Stopping' restrictions.

The changes will result a net increase of 4 parking spaces.

4 of the spaces are proposed to be signposted as '10 Minute parking, 7.00 to 9.30 am, 3.00 to 6.00 pm, Weekdays Only.'

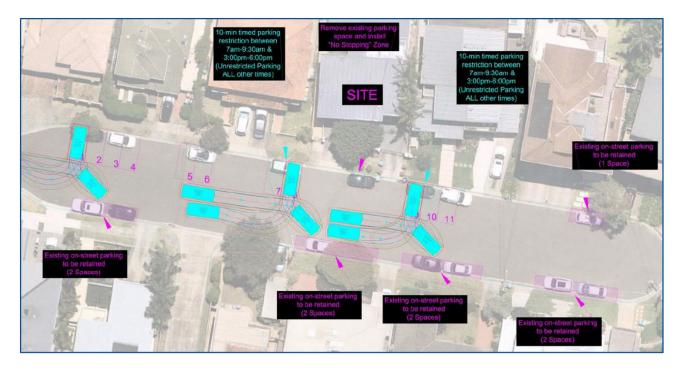


Figure 1. Proposed angle parking in Clyde Street.

Arising from the section 34 conference was the difficulties opposing drivers have passing each other in the narrow section of Clyde Street. Three passing bays have been proposed to address this. The parking bays are simply three sections of the kerb that would be signposted as 'No Parking.' They each cover two driveways and the spaces in between. The spaces in between the driveways are not long enough to accommodate a car. The locations are shown in Figure 2.



Figure 2. Proposed passing bays.

2. Introduction/Background

The proposed development at 140 Clyde Street involves additions to the building to accommodate an increase of childcare places from 27 to 43 (16 additional places). The number of staff would increase from 6 to 8.

The site contains 2 staff car parking spaces on site and a one-way drive-through drop-off/pick-up facility.

Replacement of parallel parking with angle parking and removal of one existing parking space is proposed for part of Clyde Street. Four additional car parking spaces will result. Council and applicant experts have agreed that the additional 4 parking spaces are sufficient to accommodate the increase in parking demands associated with the 16 childcare places.

Provision of passing bays along the narrow section of Clyde Street have been recommended by Council and applicant experts. Three locations have been nominated:

- Zone A Across the driveways of 78 to 82 Clyde Street.
- Zone B Across the driveways of 33 to 35 Clyde Street.
- Zone C Across the driveways of 43A to 45 Clyde Street.

Table 1. Existing and proposed childcare places, staffing and parking.

	Existing	Proposed
Staffing requirement	7	8
Places – 18 months–3 years	10	-
Places – 2–3 years	-	20
Places – 3–5 years	17	29
On-site parking	2	2

3. Technical Analysis

The proposed angle parking spaces comply with AS2890.5 - 2020 - On-street Parking. Swept wheel paths have been undertaken for cars accessing the spaces.

If implemented, it is recommended that the spaces are signposted but not line marked. Line marking provides little benefit and results in ongoing maintenance costs.

The proposed timed restrictions for 4 of the angle parking spaces should be subject to community consultation. Consent conditions should reflect this.

The proposed locations and number of bays are to be subject to community consultation. Consent conditions should reflect this.

4. Financial Information for Council's Consideration

All costs associated with any change to parking restrictions will be borne by the applicant If the development application is approved.

5. Attachments

1. Traffic and Parking Impact Assessment - 11 March 2022 👃



REVISED TRAFFIC AND PARKING IMPACT ASSESSMENT OF THE PROPOSED CHANGE IN SCALE OF THE EXISTING CHILD CARE CENTRE AT 140 CLYDE STREET, NORTH BONDI



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Division of RAMTRANS Australia ABN: 45067491678 RPEQ: 19457

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

210880.01FA - 11 March 2022



Development Type:	Child Care Centre
Site Address:	140 Clyde Street, North Bondi
Prepared for:	Active Kids
Document reference:	210880.01FA

Status	Issue	Prepared By	Checked By	Date			
Original Project No. 200661							
Draft	Α	АТ		6 th May 2021			
Draft	В		СМ	19 th May 2021			
Draft	С	AT	СМ	24 th June 2021			
Final	Α	AT	СМ	25 th June 2021			
Revised Project No. 210880							
Draft	Α	АТ	СМ	10 March 2022			
Final	Α	СМ		11 March 2022			

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210880.01FA - 11 March 2022



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210880.01FA - 11 March 2022



1 INTRODUCTION

M^cLaren Traffic Engineering was commissioned by *Active Kids* to provide a revised traffic and parking impact assessment for the proposed change in scale of the existing Child Care Centre at 140 Clyde Street, North Bondi as depicted in **Annexure A**.

1.1 Description and Scale of Development

The existing approved development (*DA-519/2005/C*) has the following characteristics and scale relevant to traffic and parking:

- A total of 27 children and 6 staff members as per the following:
 - No children between 0-2 years old;
 - o 15 children between 2-3 years old (staff assigned at 1 per 5 children, or 3 staff);
 - 12 children between 3-5 years old (staff assigned at 1 per 10 children, or 2 staff);
 - One (1) co-ordinator / 'floating' staff member;
- Hours of operation are 8:00am to 5:30pm, Monday to Friday (with approval to operate until 6:00 PM Monday to Friday);
- A total of two (2) existing car spaces for staff on site;
- A one-way drive through drop-off / pick-up facility.

The proposed development application seeks to modify the scale of the child care centre with the following characteristics relevant to traffic and parking:

- A total of 43 children and 8 staff members as per the following:
 - No children between 0-2 years old;
 - o 25 children between 2-3 years old (staff assigned at 1 per 5 children, or 5 staff);
 - 18 children between 3-5 years old (staff assigned at 1 per 10 children, or 2 staff);
 - One (1) support staff member;
- Hours of operation are 7:00am to 6:00pm, Monday to Friday;

There are no proposed changes to the internal staff parking (two spaces) or the existing one-way drive through drop-off / pick-up facility.



1.2 State Environmental Planning Policy (Infrastructure) 2007

The proposed development does not qualify as a traffic generating development with relevant size and/or capacity under *Clause 104* of the *SEPP (Infrastructure) 2007*. Accordingly, formal referral to the Roads and Maritime Services (RMS) is unnecessary and the application can be assessed by Waverly Council officers accordingly.

It is relevant to note that child care centres are not defined as educational establishments under the *SEPP (Educational Establishments and Child Care Facilities) 2017*, as such referral to the RMS in accordance with the *SEPP (Educational Establishments and Child Care Facilities)* is not required.

1.3 Site Description

The subject development involves increasing the scale of the existing child care centre. The site is currently zoned R_2 – Low Density Residential under the Waverly Council Local Environmental Plan 2012. The child care centre has a single frontage to Clyde Street to the south and is generally surrounded by residential dwellings.



1.4 Site Context

The location of the site is shown on an aerial photo and a street map in **Figure 1** and **Figure 2** respectively.



Site Location



Child Care Centre 140 Clyde Street, North Bondi 210880.01FA - 11 March 2022 Page 3 of 25

Waverley Traffic Committee



2 EXISTING TRAFFIC AND PARKING CONDITIONS

2.1 Road Hierarchy

The road network servicing the site has characteristics as described in the following subsections.

2.1.1 Clyde Street

- Unclassified LOCAL Road;
- Approximately 12.8m wide carriageway facilitating two-way traffic flow and parallel kerbside parking along the frontage of the site;
- Approximately 7m wide carriageway facilitating two-way traffic flow with opportunities for two-way passing at driveways further west of the site, with approximately 6m wide verges on either side of the carriageway;
- No speed limit signposted, default 50km/hr speed limit applies;
- Unrestricted kerbside parking available along both sides of the street.

2.1.2 Oakes Place

- Unclassified LOCAL Lane;
- Approximately 6m wide carriageway accessing single residential dwellings;
- No speed limit signposted, default 50km/hr speed limit applies;
- No through road;
- Kerbside parking not permitted but observed as a regular occurrence;

2.1.3 Hardy Street

- Unclassified LOCAL COLLECTOR Road;
- Approximately 10m wide carriageway facilitating one traffic flow lane in each direction and kerbside parking;
- Signposted 50km/h speed limit;
- Unrestricted kerbside parking along both sides of the street.
- 2.1.4 Waratah Street
 - Unclassified LOCAL Road;
 - Approximately 7m wide carriageway facilitating two-way traffic flow with opportunities for two-way passing at driveways further west of the site;;
 - No speed limit signposted, default 50km/hr speed limit applies;
 - No through road;
 - Unrestricted kerbside parking available along both sides of the street.
 - Pedestrian laneway provided between Waratah Street and Clyde Street;

Page 4 of 25



2.2 Existing Traffic Management

- "Give Way" sign-controlled intersection of Clyde Street / Hardy Street;
- Priority controlled intersection of Clyde Street / Oakes Place.

2.3 Existing Parking Environment

Parking surveys were undertaken on Tuesday the 23^{rd} , Wednesday the 24^{th} and Thursday the 25^{th} of February 2021 at 15-minute intervals within 300m of the existing childcare centre between the hours of 7:00 AM – 11:00 AM and 2:00 PM – 8:00 PM, representing a typical weekday. The results of this data are summarised in the following sub-sections of this report and full results are reproduced within **Annexure B** for reference.

Figure 3 below outlines the extent of the survey area.



FIGURE 3: PARKING SURVEY AREA

There is a total on-street parking capacity within the survey zone of **216** on-street car parking spaces. This total consists of **44** parking spaces within 100m walking distance from the site, **69** parking spaces between 100m-200m walking distance from the site, and **103** parking spaces between 200m-300m walking distance from the site.

Child Care Centre 140 Clyde Street, North Bondi 210880.01FA - 11 March 2022 Page 5 of 25



The area referred to within this report as the **Clyde Street** "**Wide Section**" is the section of Clyde Street identified in a red box above in **Figure 3**, or more specifically the section of Clyde Street where the carriageway width is 12.8m, when compared to the remainder of Clyde Street, which has a carriageway width of approximately 7m. Within this Clyde Street "Wide Section" zone there are 12 on-street parking spaces if strictly adopting the parallel space requirements of *AS2890.5:2020*, which requires a minimum parallel parking bay length of 5.4m. However, on-site observations made during multiple site-visits and review of aerial photography on *NeapMap.com* indicates that the Clyde Street "Wide Section" has an "in-practice" operational on-street parking capacity of 16 parking spaces.

This difference in the observed car parking capacity and *AS2890.5:2020* parking capacity is primarily due to the parking behaviour of residents and visitors to the area, whereby the high demand for on-street parking leads drivers to utilise typically smaller car parking spaces than what is outlined in *AS2890.5:2020*. This may include, a prevalence of smaller cars, drivers parking closer to the edges of driveways and drivers leaving smaller gaps between parked vehicles on-street, than would otherwise be accepted in locations with a lower on-street parking demand. This type of parking behaviour was observed to occurred throughout all parking zones to some extent during the parking surveys, and as can be seen by **Figure 4** below, which was taken on a Sunday, this type of parking behaviour also occurs during the weekend.

An example of such behaviour is the section of kerbside parking immediately to the east of the site, which has a length of 10m between driveways. In accordance with *AS2890.5:2020* this kerbside zone can accommodate only one (1) parked vehicle with a minimum 5.4m space length. On-site observations and review of aerial imagery through *Nearmap.com* identifies that this zone regularly facilities two (2) parked vehicles, as shown in **Figure 4** below. As such the "in-practice" operational parking capacity of this zone is in fact two (2) car parking spaces.

For the purpose of analysis within this report the Clyde Street "Wide Section" is considered to have a total on-street parking capacity of 16 car parking spaces, as identified below in **Figure 4**. The total capacity across the survey area of 216 spaces, also includes the assumption that this zone has an "in-practice" operational capacity of 16 spaces.

Child Care Centre 140 Clyde Street, North Bondi 210880.01FA - 11 March 2022





Site AS2890.5:2020 Non-Compliant On-Street Parking Spaces (< 5.4m length)

FIGURE 4: CLYDE STREET "WIDE SECTION" OBSERVED PARKING CAPACITY DATE OF AERIAL PHOTO: SUNDAY 6TH DECEMBER, 2020

2.3.1 Summary of Overall Parking Performance

Table 1 and **Table 2** below outline the parking capacity within the survey area and the minimum available spare capacity over the entire survey period of 7:00 AM - 11:00 AM and 2:00 PM - 8:00 PM.



TABLE 1: AM (7:00AM-11:00AM) EXISTING PARKING SUPPLY & SPARE CAPACITY(WITHIN 300M OF THE SITE)

			Spare Capacity									
Parking Zone	Total Capacity	Tuesday 23 rd February	Wednesday 24 th February	Thursday 25 th February								
Clyde Street "Wide Section"												
Clyde Street "Wide Section"	16 ⁽²⁾	1 [8:30-9:00] ⁽³⁾	0 [7:00-8:15, 9:00-10:00]	0 [7:30-10:45]								
All Zones												
Within 100m ⁽⁴⁾	44 ⁽⁵⁾	6 [8:45-9:00]	0 [7:00-7:45]	0 [7:30-9:00]								
Between 100m - 200m	69	5 [7:00]	6 [7:00-7:15]	0 [7:30-9:15]								
Between 200m - 300m ⁽⁶⁾	103	0 [7:00-7:30]	8 [7:00-7:15]	8 [7:00]								
Total	216 ⁽⁷⁾	15 ⁽⁸⁾ [7:00]	14⁽⁸⁾ [7:15]	12 ⁽⁸⁾ [7:30]								

Note:

(1) The minimum spare capacity for each survey area is the minimum recorded parking available within that area at any given time within the survey period.

(2) The total on-street parking capacity of Clyde Street "Wide Section" zone is recorded as 16 on-street car parking spaces, as discussed in **Section 2.3** above.

(3) Values in [] denotes the 15-min survey period (or periods) where-by the minimum spare capacity was recorded within this zone.

(4) The "Within 100m" zone includes the "Clyde Street "Wide Section" zone as well.

(5) The 44-space capacity includes the 16 spaces observed within the Clyde Street "Wide Section" and the other 28 spaces outside of this zone within 100m of the site.

(6) The 200m-300m zone includes some area's beyond 300m along Clyde Street up until its intersection with Hardy Street.

(7) The 216 total capacity includes the 16 spaces observed within Clyde Street "Wide Section" within its total capacity.

(8) The total represented here is total capacity minus the maximum parking demand occurring during a 15-min period across the entire survey. In the instance of the AM period on Tuesday 23rd February, the maximum parking demand across the entire survey occurred at 7:00 AM where there were 201 parked vehicles within the survey zone (i.e. within 300m). This results in a minimum spare capacity within this 15-min period (7:00 AM) of 15 (216-201=15) car parking spaces. At the 7:00 AM period on Tuesday 23rd February there were 17 available spaces within 100m of the site, where in-fact the minimum spare capacity within 100m of the site.



TABLE 2: PM (2:00PM-8:00PM) EXISTING PARKING SUPPLY & SPARE CAPACITY(WITHIN 300M OF THE SITE)

			Spare Capacity										
Parking Zone	Total Capacity	Tuesday 23 rd February	Wednesday 24 th February	Thursday 25 th February									
Clyde Street "Wide" Section													
Clyde Street "Wide Section"	16 ⁽²⁾	0 [16:00, 16:30- 17:45,18:30-19:45] ⁽³⁾	0 [15:00-15:45, 18:45]	0 [15:00-16:30, 17:15- 17:30,18:00-19:45]									
	All Zones												
Within 100m ⁽⁴⁾	44 ⁽⁵⁾	0 [19:15-19:45]	5 [18:30-18:45]	2 [16:30,18:30-18:45]									
Between 100m - 200m	69	4 [19:45]	13 [19:30-19:45]	5 [19:15-19:45]									
Between 200m - 300m ⁽⁶⁾	103	7 [19:45]	2 [19:30]	0 [19:15-19:45]									
Total	216 ⁽⁷⁾	8 (8) [19:45]	21 ⁽⁸⁾ [19:30]	16 ⁽⁸⁾ [19:15]									

Note: Refer to Table 1 for notes 1 to 7.

(8) The total represented here is total capacity minus the maximum parking demand occurring during a 15-min period across the entire survey. In the instance of the PM period on Tuesday 23rd February, the maximum parking demand across the entire survey occurred at 19:45 (7:45 PM) where there were 208 parked vehicles within the survey zone (i.e., within 300m). For the purposes of the overall total spare capacity presented here this is made up of a total of 47 vehicles parked within 100m of the site, 65 vehicles between 100-200m and 96 vehicles between 200m-300m, (47+65+96=208). This results in a spare capacity within this 15-min period (7:45 PM) of 8 (216-208=8) car parking spaces. At the 19:45 (7:45 PM) period on Tuesday 23rd February there were 47 parked vehicles within 100m of the site (including illegally parked vehicles), which is three (3) vehicles beyond this zones allotted capacity, which has been recorded as a spare capacity of zero, in the above table.

The results of the parking surveys undertake from Tuesday the 23rd of February 2021 until Thursday 25th of February 2021 indicate that during the survey periods the on-street car parking reaches capacity across all zones. Typically, during the AM survey period on-street parking was generally at capacity during the 7:00-8:00 AM period while during the PM survey period on-street parking was generally at capacity during the 7:00-8:00 PM period.

While the above tables give an indication of the minimum number of available parking spaces available over the full survey period (7:00 AM - 11:00 AM and 2:00 PM - 8:00 PM), it does not provide the full picture of the existing parking behaviour surrounding the site.

These parking surveys have identified that on-street parking within this area is primarily residential in nature, with the peak parking occupancy occurring during the overnight period when residents are residing at home.

Figure 5 below shows the spare parking capacity available over the entire survey period across all zones.



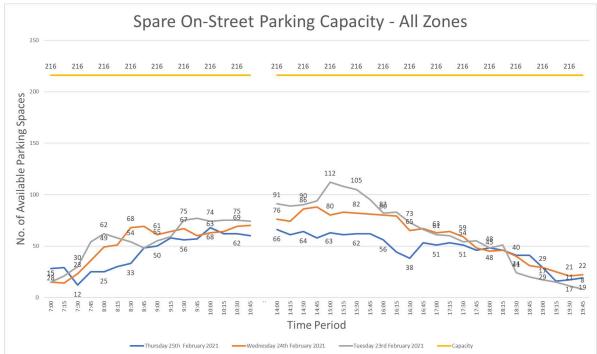


FIGURE 5: TOTAL SPARE PARKING CAPACITY GRAPH

As can be seen from **Figure 5**, the available parking increases into the middle of the day, with over 50 (23%) car parking spaces available within 300m of the site between the hours of 9:00 AM and 4:00 PM. Excluding the Thursday survey a minimum of 45 (21%) car parking spaces are available within 300m of the site between 8:00 AM and 6:00 PM. **Table 3** below outlines the recorded spare parking capacity taken as a snapshot at the beginning of each hour of the survey across all three days of the survey.

Period ⁽¹⁾		7:00 AM	8:00 AM	9:00 AM	10:00 AM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	7:45 PM
Tuesday	No.	15	62	55	74	91	112	82	61	48	17	8
23 rd Feb	%	7%	29%	25%	34%	42%	52%	38%	28%	22%	8%	4%
Wednesday	No.	15	49	61	63	76	80	80	63	45	29	22
24 th Feb	%	7%	23%	28%	29%	35%	37%	37%	29%	21%	13%	10%
Thursday	No.	28	25	50	68	66	63	56	51	48	29	19
25 th Feb	%	13%	12%	23%	31%	31%	29%	26%	24%	22%	7%	9%
Minimum	No.	15	25	50	63	66	63	56	51	45	17	8
Observed ⁽³⁾	%	7%	12%	23%	29%	31%	29%	26%	24%	21%	7%	4%

TABLE 3: HOUR-BY-HOUR SPARE PARKING CAPACITY FROM SURVEY

(ALL ZONES – 216 SPACES)

Note:

(1) The figures presented within this table represent the spare parking capacity during the 15-min period starting at the titled time. I.e. the results provided for 7:00 AM, is the parking results for the period of 7:00 - 7:15 AM.

(2) Green cells represent times when car parking occupancy is less than 85% (at least 15% of spaces are available) and orange cells represent when parking occupancy is greater than 85% (less than 15% of spaces are available).

(3) The minimum observed occupancy for that single period over the entire three (3) days of survey's.

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As can be seen from the above summary, parking demand decreases into the middle of the day within 300m of the site, with the maximum available on-street parking generally occurring around 2:00 PM with at least 66 spaces (31%) of parking spaces available within 300m of the site. With at least 50 (23%) on-street car parking spaces available between the hours of 9:00 AM and 4:00 PM.

A graphical summary of all the parking survey data is provided in Annexure C.

2.4 Existing Traffic Environment

Intersection traffic surveys were conducted at the intersections of Hardy Street / Clyde Street from 7:00 AM to 9:00 AM and 2:30 PM to 6:00 PM on Tuesday the 22nd of September 2020 representing a typical operating weekday. The full survey results are shown in **Annexure D** for reference.

2.4.1 Existing Road Performance

The performance of the surrounding intersections under the existing traffic conditions has been assessed using SIDRA INTERSECTION 9.0, **Table 4** summarises the resultant intersection performance data, with full SIDRA results reproduced in **Annexure E**.

Intersection	Peak Hour	Degree of Saturation ⁽¹⁾	Average Delay ⁽²⁾ (sec/veh)	Level of Service ⁽³⁾⁽⁴⁾	Control Type	Worst Movement	95th Percentile Queue			
EXISTING PERFORMANCE										
	AM	0.25	1.6	NA		RT from	0.5 veh (3.7m)			
Hardy Street	Alvi	0.25	(Worst: 12.2)	(Worst: B)	Give Way	Clyde Street	Hardy Street			
/ Clyde Street	PM	0.19	1.5	NA	Give Way	RT from	0.4 veh (2.6m)			
	FIVI	0.19	(Worst: 9.4)	(Worst: A)		Clyde Street	Hardy Street			

TABLE 4: EXISTING INTERSECTION PERFORMANCES (SIDRA INTERSECTION 9.0)

NOTES:

(1) The Degree of Saturation is the ratio of demand to capacity for the most disadvantaged movement.\

(2) The average delay is the delay experienced on average by all vehicles. The value in brackets represents the delay to the most disadvantaged movement

(3) The Level of Service is a qualitative measure of performance describing operational conditions. There are six levels of service, designated from A to F, with A representing the best operational condition and level of service F the worst. The LoS of the intersection is shown in bold, and the LoS of the most disadvantaged movement is shown in brackets.

(4) No overall Level of Service is provided for Give Way and Stop controlled intersections as the low delays associated with the dominant movements skew the average delay of the intersection. The Level of Service of the worst approach is an indicator of the operation of the intersection, with a worse Level of Service corresponding to long delays and reduced safety outcomes for that approach.

As shown above, the intersection of Hardy Street / Clyde Street is currently performing at a high level of efficiency, with a level of service "A" or "B" conditions in both the AM & PM peak hour periods. The level of service "A" and "B" performance is characterised by low approach delays and spare capacity.

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2.5 Existing Child Care Centre Travel Behavior

Parent / carer and staff travel mode surveys were undertaken on Tuesday 23rd of February, Wednesday 24th of February and Thursday 25th of February 2021 during both the AM and PM pick-up & drop-off periods, and once a day for staff. The results of this data are summarised in the following sub-sections of this report and full results are reproduced within **Annexure F** for reference.

2.5.1 Parent / Carer Travel Behaviour

These travel mode surveys of parents / carers were conducted both as they dropped-off and picked-up their child/children from the child care centre each day, in order to capture different travel behaviours across both AM and PM periods and across different days. It is noted that on the survey days the weather was overcast with rain occurring throughout the day in particularly on Wednesday 24th February, which may have resulted in a higher than average vehicle dependency.

A total of 111 responses were received from parents at the centre, and **Figure 6** below, provides a summary of the parent / carer travel mode survey results.

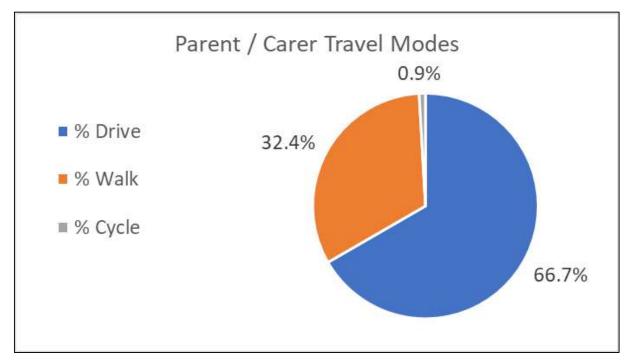


FIGURE 6: PARENT / CARER TRAVEL MODE SURVEY RESULTS

The above travel mode survey results indicate that of the existing parents / carers of the centre 66.7% drive, with the other 33.3% of trips made using active travel modes such as walking (32.4%) and cycling (0.9%). The high level of parents found to be walking to / from the child care centre is typical for a small suburban child care centres located in residential areas, such as this.

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In addition, parents / carers were asked about how far away from the child care centre they lived in terms of walking time. A total of 109 responses were received across the survey to this question and **Figure 8** below provides a summary of walking distance parent / carers indicated that they live from the child care centre.

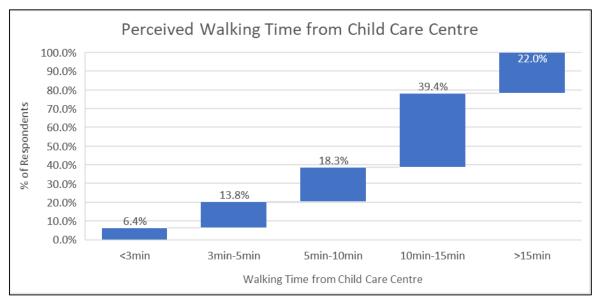


FIGURE 7: PERCEIVED WALKING TIME TO CENTRE FOR PARENTS / CARERS

As can be seen above approximately, 6.4% of parent / carers reported that they live within 3-minute walking distance and 20.2% (6.4% + 13.8%) of parent / carers reported they live within 5-minutes of the centre. Further afield, approximately 18.3% of parent / carers live within 5-10mins walking distance and 39.4% live within 10-15mins walking distance of the Centre. Only 22% of parent / carers reported that they live beyond a 15-minute walk of the child care centre. These results indicate that approximately 38.5% of parents / carers live within 10-minutes walking distance of the centre.

2.5.2 Staff Travel Behaviour

The travel mode surveys of staff were undertaken once a day for three days, to capture the different travel behaviours of all staff associated with the centre, including those who might not work each day. A total of 21 responses were received from the staff and **Figure 8** below, provides a summary of the staff travel mode survey results.

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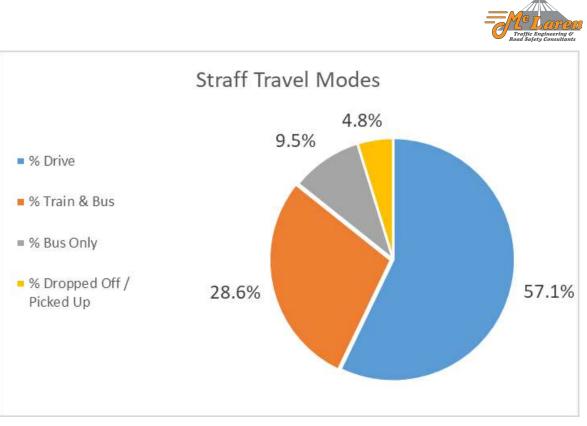


FIGURE 8: STAFF TRAVEL MODE SURVEY RESULTS

These survey results indicate that 57.1% of staff drive to and from the centre, 38.1% of staff catch public transport (9.5% catching only the bus and another 28.6% catching the train and bus to access the centre), and 4.8% of staff are dropped off / picked-up at the centre. These results indicate a high level of public transport utilisation for the existing child care centre. This high level of public transport utilisation is expected to continue into the future due to the sites proximity to the very regular 379 bus route accessible from Murriverie Road and other services.

2.6 Public Transport

The subject site has access to the existing bus stops (Stop ID: 202672 and 202679) which are located approximately four (4) minutes (250m) walk from the site on Murriverie Road between Fredrick Street and Knowles Avenue. These bus stops are serviced by the bus route 379 (North Bondi to Bronte) which runs regularly between 4:30am and 1:00am, with a frequency of one service approximately every 10-minutes in both directions between 6am and 9pm, Monday to Friday, provided by *State Transit*.

The subject site also has access to the existing bus stops (Stop ID: 203011 and 203051) which are located approximately four (4) minutes (280m) walk from the site on Military Road outside Hugh Bamford Reserve. These bus stops are serviced by the bus routes 323 (North Bondi to Edgecliff via New South Head Road) and 380 (Watsons Bay to Bondi Junction via Bondi Beach). Bus route 323 operates between 6am-9am (six services towards Edgecliff Station only) and between 4:30pm and 7pm (seven services from Edgecliff Station only), with a service every 20-30 minutes provided by *State Transit*. Bus route 380 operates between 6am and midnight, with a frequency of one service approximately every 20-minutes in both directions between 8am and 7pm, Monday to Friday provided by *State Transit*.

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Bondi Junction Train Station is located approximately 3.7km east of the site and is accessible via both the 379 and 380 bus routes.

The location of the site subject to the surrounding public transport network is shown in **Figure 9**.





2.7 Future Road and Infrastructure Upgrades

From Waverly Council Development Application tracker and RMS Projects website, it appears that there are no future planned road or public transport changes that will affect traffic conditions within the immediate vicinity of the subject site.

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3 PARKING ASSESSMENT

3.1 Council Parking Requirement

Reference is made to *Waverly Development Control Plan 2012 – Part F: Development Specific – Chapter F3: Child Care Centres* which specifies that a development application for a centre-based child care facilities are to comply with the provision of the *Child Care Planning Guideline 2017 (CCPG2017)*. The CCPG2017 designates the following parking rates applicable to the proposed development:

3.8 Traffic, parking and pedestrian circulation

C31

Where a Development Control plan does not specify car parking rates, off street car parking should be provided at the following rates:

In other areas [not within 400m of a metropolitan train station]:

1 space per 4 children.

Table 5 presents the parking requirements of the proposed increase in children at the child

 care centre according to the Council's and CCPG2017 car parking rates.

Land Use	Scale	Rate	Additional Spaces Required	Additional Spaces Provided
Child Care Centre	+16 Children	1 per 4 children	+ 4	4 (On-Street)

TABLE 5: DCP / CCPG2017 PARKING RATES

As shown above, strict application of the *CCPG2017* requires a total of four (**4**) additional car parking spaces. The proposed increase in scale does not propose any increase in car parking spaces on-site from the previously approved provision of two (2) staff spaces on-site and a one-way drive through drop-off / pick-up facility.

It is proposed that this DCP parking requirement will be met through the increase in onstreet parking capacity along Clyde Street, resulting in a net increase of four (4) on-street car parking spaces. This will be achieved through the re-allocation of kerbside parallel parking spaces along the northern side of the Clyde Street "Wide Section" to 90-degree parking spaces. This 90-degree on-street parking proposal for the Clyde Street "Wide Section" is outlined in detail below in **Section 3.1.1**.

In an operational sense, the additional demand for four (4) car parking spaces comprises 2-3 additional parents and only 1 additional staff member space. The proposal to provide 10minute time restricted parking spaces (between 7:00 AM - 9:30 AM and 3:00 PM - 6:00 PM, Monday to Friday) within the "Wide Section" of Clyde Street, is intended to better manage through an operational plan of management the duration of parent / carer parking demand, within on-street parking spaces, close to the site. The additional staff member who drives

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will be able to find available car parking within 300m of the site, as this staff member is likely to be on-site during the middle of the day.

It is reiterated that these additional four (4) car parking spaces will cater for both the proposed increase and part of the existing parent / carer car parking demand and will be signposted with a 10-minute time restriction between 7:00 AM - 9:30 AM and 3:00 PM - 6:00 PM, Monday to Friday, and will be unrestricted at all other times. This proposal will require the approval of Council's local traffic committee.

Considering the increase of four (4) on-street car parking spaces within the Clyde Street "Wide Section" (within the close vicinity of the subject site) the DCP parking requirements can be met on-street without any loss to the existing on-street parking for local residents. This approach is fully supportable and provides additional car parking spaces available for all local residents outside of the peak drop-off / pick-up times of the child care centre.

3.1.1 Clyde Street 90-Degree On-Street Parking Concept

The eastern most portion of Clyde Street, North Bondi (previously referred to as the Clyde Street "Wide Section"), has a road carriageway width of 12.8m wide, which is significantly wider than the remainder of Clyde Street which has a carriageway width of only approximately 7m. This carriageway width has the ability to be utilised more efficiently in order to serve the high-parking demand of the local area. This can be achieved through the re-allocation of the northern kerbside parallel parking spaces to form new 90-degree on-street parking spaces designed in accordance with *AS2890.5:2020*.

It is proposed that the existing seven (7) parallel kerbside parking spaces along the northern side of Clyde Street "Wide Section" between 136 and 142 Clyde Street, are converted to form eleven (11) *AS2890.5:2020* compliant on-street 90-degree parking spaces (2.6m width, 5.4m length), in accordance with the concept provided in **Annexure G**, with an overview provided below in **Figure 10**.



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FIGURE 10: CLYDE STREET 90-DEGREE PARKING CONCEPT

This results in a total of 20 on-street car parking spaces within the Clyde Street "Wide Section" zone which is a net increase of four (4) spaces from the observed on-street capacity of 16 parking spaces. It is noted that the single on-street parking space (albeit non-compliant) located between the sites entry and exit driveways will be removed with the installation of "No-Stopping" signage to prohibit parking in this location, providing a positive safety outcome for the existing drive-through facility operating on the site.

For the purposes of the child care centre it is proposed that the four (4) closest 90-degree car parking spaces (as identified in light blue above) have a 10-minute time restriction placed on them between the peak pick-up and drop-off periods of the child care centre, being 7:00 AM - 9:30 AM and 3:00 PM - 6:00 PM, Monday to Friday. Outside of these hours these spaces can be unrestricted and will provide four (4) additional on-street car parking spaces for the surrounding residents of Clyde Street, including use by residents and their visitors on weekends and overnight outside of the proposed hours of operation for the subject child care centre.

3.2 Impact of adjusted operating hours

This proposal also includes the extension of the child care centres operating hours which are currently 8:00 AM - 5:30 PM, to new operating hours between 7:00 AM - 6:00 PM. The extension of the operating hours during the morning and afternoon periods will assist in the dispersion of parking demand during the AM drop-off and PM pick-up period.

As identified earlier the proposal is to create four (4) new on-street 10-minute time restricted 90-degree parking spaces during these periods of 7:00 AM – 9:30 AM and 3:00 PM - 6:00 PM, Monday to Friday, which will cater for this parking demand, during the extended hours of operation, subject to approval by the local traffic committee and council. While it is noted that there is limited on-street parking available during this period the earliest arriving staff members will utilise the two (2) existing on-site parking spaces, and parents can utilise both the existing on-site drive-thru arrangements (two drive through spaces) as well as the four (4) additional time-restricted 90-degree on-street parking spaces. It is noted that on-street parking availability steadily increases from 7:00am onwards, as residents depart for the day.

The extended operating hours will not have any detrimental impact on the parking availability surrounding the site and is expected to assist with the dispersion of the on-street parking demands of parents during pick-up and drop-off periods.

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3.3 Disabled Parking

Waverly Council DCP does not outline disabled car parking rates for the child care centre. The existing child care centre does not provide any disabled parking spaces and was approved without the provision of it. As such, no additional disabled space has been provided.

Disabled parking for child care centres typically relate to parents or carers and not to children or staff. The PoM can be further enhanced to include a management protocol that allows disabled parents/carers to utilise the on-site drive-through lane with a staff member collecting the child from the parked car on arrival and delivering the child to the parked vehicle on collection so that the disabled driver does not need to leave their car.

3.4 Bicycle & Motorcycle Parking Requirements

The existing child care centre does not provide any motorcycle or bicycle parking spaces and was approved without the provision of them.

Reference is made to the *Waverly Development Control Plan 2012 Part B – General Provisions,* which outlines the following bicycle parking rates for child care centres.

Healthcare, Childcare, Other

Staff

0.1 spaces per staff

Visitor

0.05 spaces per visitor

This results in a provision of **0.2** bicycle spaces for staff (a net increase of 2 staff members) and a null provision of visitor bicycle spaces as no visitor parking spaces are proposed. The provision of no additional bicycle parking spaces is considered acceptable. If a staff member intended on cycling to the child care centre, the bicycle could be stored informally within the building.

3.5 Servicing & Loading

There are no proposed changes to the servicing and loading operations of the site nor is the proposed change in scale expected to change the frequency of any such servicing or loading activity.

3.6 On-Site Car Park Design & Compliance

There are no proposed changes to the existing on-site car parking layout.



3.7 On-Street Car Park Design & Compliance

As discussed previously in **Section 3.1.1** above, it is proposed that changes are made to the on-street parking provided along Clyde Street "Wide Section" within the vicinity of the site, in order to provide four (4) additional on-street parking spaces. This on-street parking design is outlined in **Annexure G**, and has been designed to meet the relevant clause and objectives of *AS2890.5:2020*.

The design achieves the following:

- Minimum 2.6m wide by 5.4m length 90-degree parking spaces;
- Minimum 2.0m wide non-line-marked parallel spaces;
- Minimum 10.8m length from the kerb line (behind 90-degree parking spaces) to the edge of parallel spaces (*Table 3.3*, of *AS2890.5:2020*).



4 TRAFFIC ASSESSMENT

The impact of the expected traffic generation levels associated with the subject proposal is discussed in the following sub-sections.

4.1 Traffic Generation

Traffic generation rates for the relevant land uses are provided in the *Roads and Maritime Services (RMS) Guide to Traffic Generating Developments (2002)* and recent supplements and are as follows:

3.11.3 Child care centres

Long-day care

7.00-9.00am	0.8 peak vehicle trips per child
2.30-4.00pm	0.3 peak vehicle trips per child
4.00-6.00pm	0.7 peak vehicle trips per child

The resulting traffic generation is summarised in Table 6.

TABLE 6: ESTIMATED TRAFFIC GENERATION

Use	Scale	Peak	Generation Rate	Trips
Long day care	+16	AM	0.8 per child	+13 (+7 IN , +6 OUT)
Long-day care	Children	PM	0.7 per child	+11 (+5 IN , +6 OUT)
Tatal		АМ	-	+13 (+7 IN , +6 OUT)
Total	-	РМ	-	+11 (+5 IN , +6 OUT)

Note: (1) Assumes 50/50 spilt of inbound and outbound traffic.

As shown, the expected increase in traffic generation associated with the future development is in the order of **13** vehicle trips in the AM peak period (7 IN, 6 OUT) and **11** vehicle trips in the PM peak period (5 IN, 6 OUT). Note that this traffic generation is considered to be conservative as it does not incorporate the high proportion of parents who use active transport (38%) such as walking or cycling to access the centre. It should be noted that the RMS traffic generation rates are based upon surveys of child care centres with 93% drivers.



4.2 Traffic Assignment

The road network and the turning movement results of the intersection survey of the Hardy Street / Clyde Street intersection have been assessed and the following traffic assignment has been assumed for all traffic to and from the site based on the traffic survey results:

- 25% to / from the North along Hardy Street;
- 75% to / from the South along Hardy Street.

4.3 Traffic Impact

The traffic generation outlined in **Section 4.1 & 4.2** above has been added to the existing traffic volumes recorded. SIDRA INTERSECTION 9.0 was used to assess the intersections performance. The purpose of this assessment is to compare the existing intersection operations to the future scenario under the increased traffic load. The results of this assessment are shown in **Table 7**.

Intersection	Peak Hour	Degree of Saturation ⁽¹⁾	(sec/veh)		Control Type	Worst Movement	95th Percentile Queue
			EXI	STING PERFO	RMANCE		
	1.6		1.6	NA		RT from	0.5 veh (3.7m)
Hardy Street	AM	0.25	(Worst: 12.2)	(Worst: B)		Clyde Street	Hardy Street
/ Clyde Street	DM	0.40	1.5	NA	Give Way	RT from	0.4 veh (2.6m)
	PM	0.19	(Worst: 9.4)	(Worst: A)		Clyde Street	Hardy Street
			FUTURE (POS	T DEVELOPME	ENT) PERFOR	MANCE	
	AM	0.25	1.7 NA			RT from	0.5 veh (3.8m)
Hardy Street	AIVI	0.25	(Worst: 12.5)	(Worst: B)		Clyde Street	Hardy Street
/Clyde Street	PM	0.19	1.7	NA	Give Way	RT from	0.4 veh (2.6m)
		0.19	(Worst: 9.5)	: 9.5) (Worst: A)		Clyde Street	Hardy Street

TABLE 7: INTERSECTION PERFORMANCE (SIDRA INTERSECTION 9.0)

Notes: Refer to Table 4 Notes

As shown, the intersection of Hardy Street / Clyde Street retains the same overall Level of Service under future conditions with minimal delays and additional capacity, indicating that there will be negligible impact on the existing road network as a result of the proposed increase in scale of this development.



4.4 Residential Amenity

Increased traffic volumes along residential roads have the potential to impact some aspects of the amenity of residents in low-density residential neighbourhoods. Over certain traffic thresholds, the ability for aged or impaired persons to cross the road and the ability for children to play safely in the street are reduced and the ambient road noise becomes noticeable to residents. The *RMS Guide to Traffic Generating Developments 2002* (RMS Guide), suggests that the environmental goal thresholds for local streets is 200 vehicles per hour and that ideally local streets should not exceed 300 vehicles per hour.

The traffic generated by the site will travel to and from the centre via the residential road being Clyde Street. The existing and future peak hourly traffic volumes along this road has been considered, as summarised in **Table 8**.

Street	Existi	ng ⁽¹⁾⁽²⁾	Future ⁽⁴⁾					
	АМ	РМ	АМ	РМ				
Clyde Street (3)	88	99	101	110				

TABLE 8: RESIDENTIAL AMENITY - PEAK HOUR TRAFFIC FLOWS

Notes (1) Taken from intersection surveys reproduced within Annexure D.

(2) Highest two-way traffic flow along subject road in any hour within the survey period. Not necessarily the intersection peak.
 (3) AM and PM two-way peak occurs at 8:00am – 9:00am and 4:30pm - 5:30pm respectively.

(4) Future equals existing two-way traffic flow plus traffic generation as determined in Section 4.1.

As shown in the above table, the two-way peak hour flows under the future scenario remain significantly below the 200 vehicle per hour environmental goal threshold suggested in the RMS Guide for the RMS thresholds for local roads. Therefore, it is concluded that residential amenity will not be adversely affected by the relatively minor increases in two-way trips.

4.5 Proposed Clyde Street Passing Zones

During consultation with local residents and Council officers, the issue of the availability of passing zones along Clyde Street between the "Wide Section" and Hardy Street was raised. The road carriageway in this location has a width of approximately 7m, with kerbside parking occurring consistently along both sides of the road. While the presence of existing driveway crossovers along this section of Clyde Street, provide multiple passing opportunities for drivers, it is recognised that Council has recommended the formalisation of these passing zones, in locations where no on-street parking can legally or physically occur, to assist all users of Clyde Street.

During a site visit with Council undertaken on Wednesday 9 March 2022, Council made three recommendations for formalised "passing zones", which are list below:

- Zone A Across the driveways of 78 to 82 Clyde Street;
- Zone B Across the driveways of 33 to 35 Clyde Street;
- Zone C Across the driveways of 43A to 45 Clyde Street.

These passing zones would be formalised through the implementation of "No Parking" zones and line marking. A detailed outlined of the proposal is provided in **Annexure H**.



It should be noted that this proposal will not result in any loss of on-street parking, as the three locations proposed occur across residential driveways, where there is insufficient room for a vehicle to park between driveways. It is noted that the Australian Standard (*AS2890.5.2020*) minimum length for a parallel space is 5.4m, but Council has indicated in this location that a realistic space length to consider is 4.2m. This proposal will improve traffic flow along Clyde Street by providing dedicated areas that can be utilised as passing zones, benefiting all residents and users of Clyde Street.



5 CONCLUSION

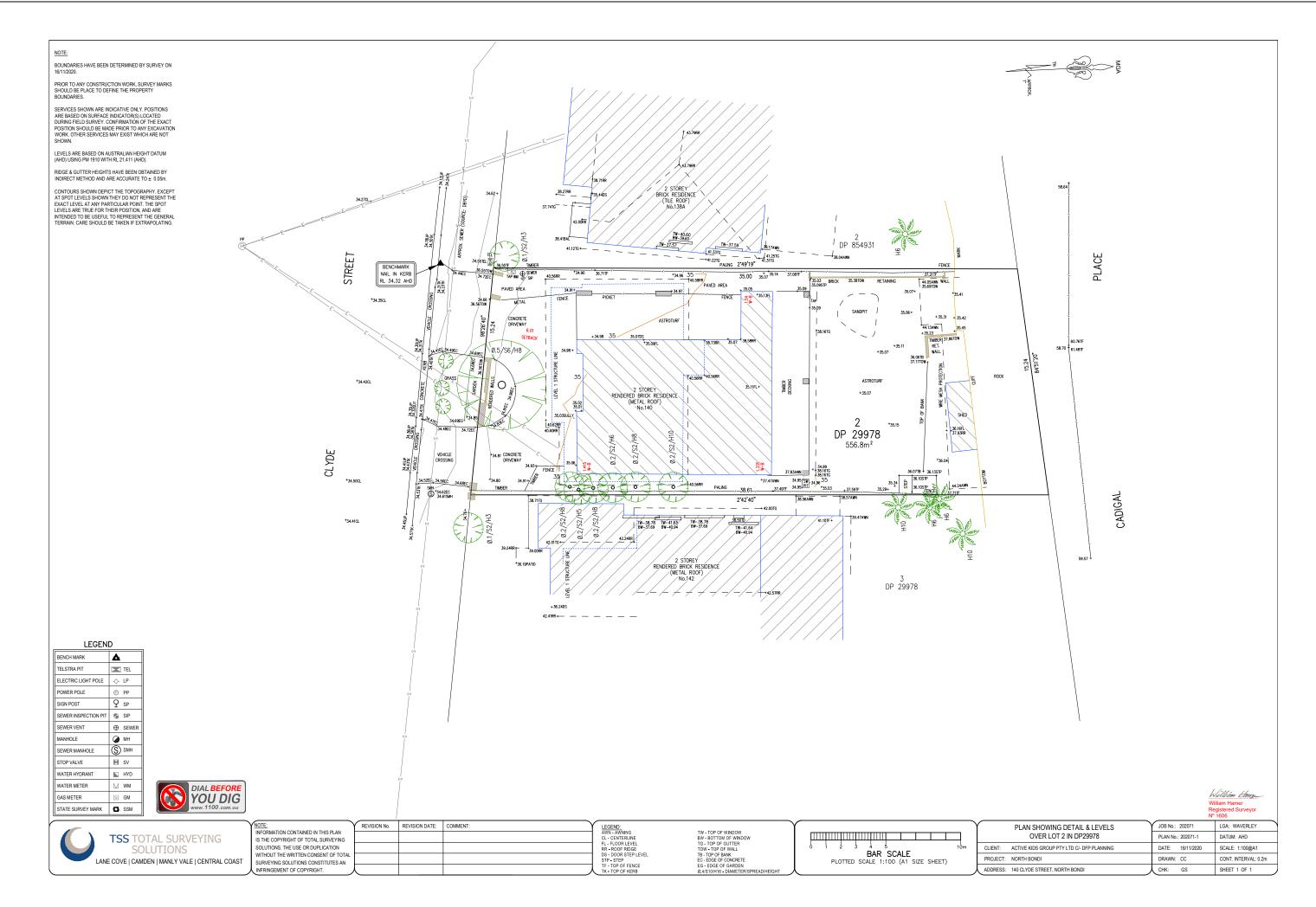
In view of the foregoing, the subject proposal for an increase in the scale of the Child Care Centre at 140 Clyde Street, North Bondi (as depicted in **Annexure A**) is fully supportable in terms of its traffic and parking impacts. The following outcomes of this traffic impact assessment are relevant to note:

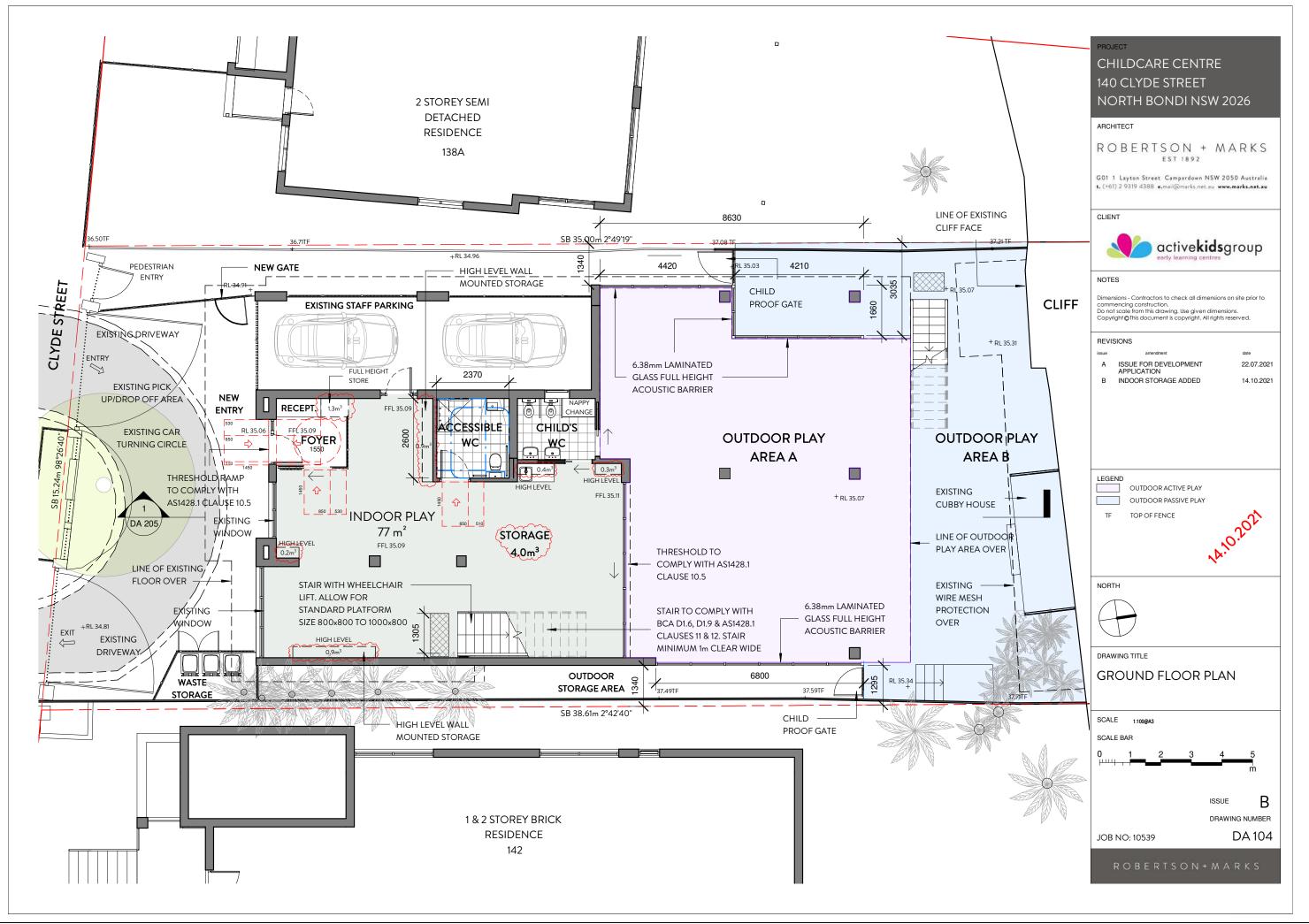
- a) The proposal is for an increase of 16 children and two (2) staff members at the existing child care centre.
- b) The proposal does not include any changes to the existing internal on-site parking or one-way drive through drop-off / pick-up facility, as these have been previously approved as part of DA-51905/B.
- c) This proposal includes the installation of 11 on-street 90-degree parking spaces along the northern side of Clyde Street, within the Clyde Street "Wide Section" zone, where the carriageway has a width of 12.8m, as outlined in **Annexure G**. This results in a net increase of four (4) car parking spaces within this zone, subject to approval from Council's local traffic committee.
- d) The four (4) additional car parking spaces created by 90-degree on-street parking proposal are proposed to be signposted as "10-minute parking 7 AM 9:30 AM & 3 PM 6:00 PM Monday to Friday" and should be unrestricted at all other times, in order to be made available for unrestricted use by local residents.
- e) On-street parking surrounding the site is primarily utilised by residents, with the peak demand for on parking occurring overnight. During the hours of 9 AM 4 PM a minimum of 50 on-street car parking spaces are available within 300m of the site.
- f) The on-street parking concept provided in Annexure G, complies with the relevant sections of AS2890.5:2020 and has been found the satisfy the objectives of this standard.
- g) The increase in traffic generation of the proposed increase in scale of this child care centre has been estimated to be some +13 trips in the AM peak period (+7 IN, +6 OUT) and +11 trips in the PM peak period (+5 IN, +6 OUT). The impacts of the traffic generation have been modelled using SIDRA INTERSECTION 9.0, indicating that there will be no detrimental impact to the performance of the intersections or on residential amenity surrounding the site as a result of the generated traffic.
- h) To improve two-way traffic flow along Clyde Street between the "Wide Section" and Hardy Street, three (3) passing zones are being proposed in the locations suggested by Council. A detailed proposal is provided in **Annexure H** for reference.

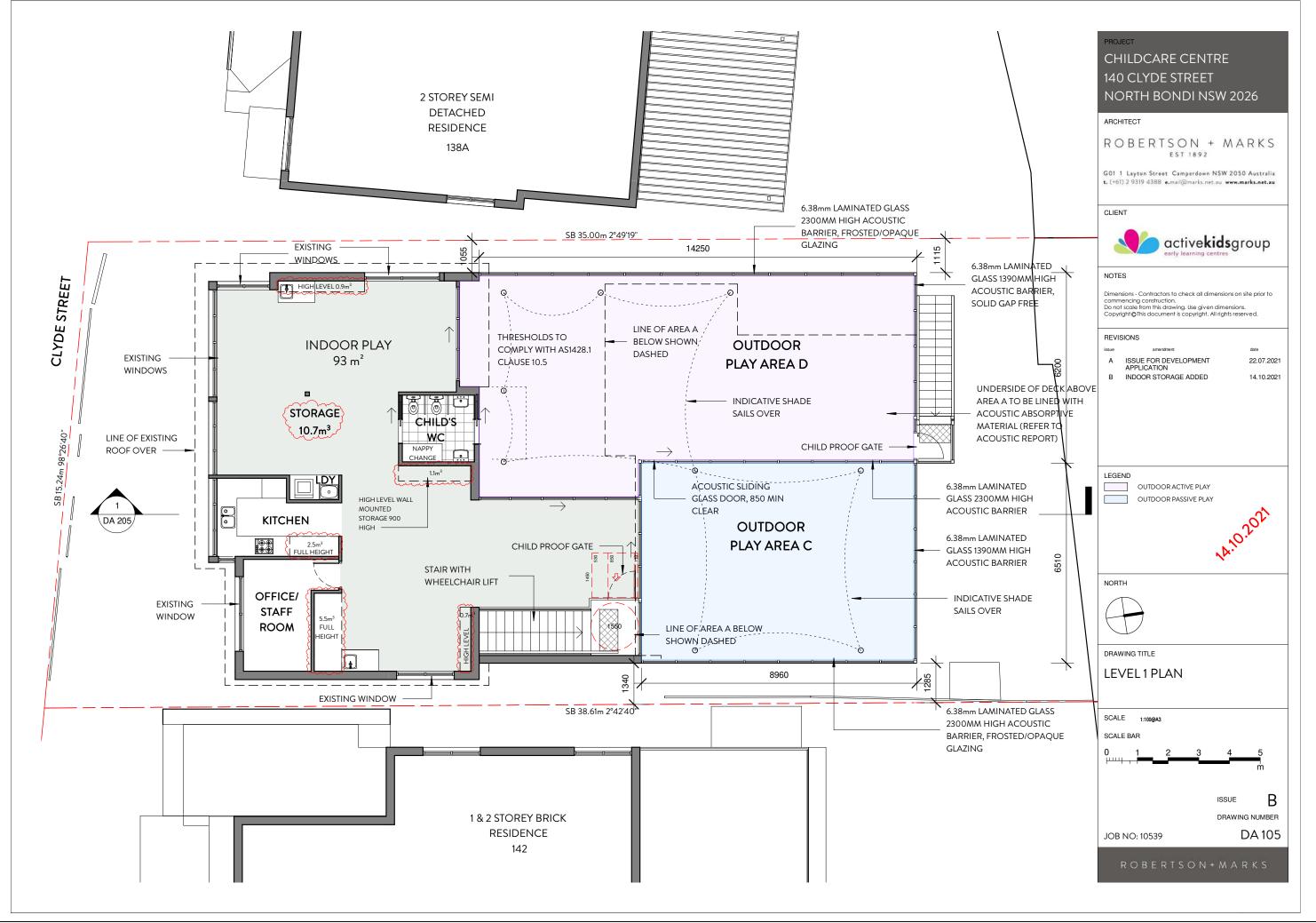


ANNEXURE A: PROPOSED PLANS

(3 SHEETS)









ANNEXURE B: PARKING SURVEY DATA

(10 SHEETS)

Curtis T	raffic Surveys		4.54	Start		Interval Size		tion Table
			AM PM	7:00			u	unrestricted
	210210mcl (20_0661)		PIN	14:00	19:45	0:15	np	no parking
	McLaren Traffic Engineering						Р	hour parking
Date	23/02/21						ns	no stopping
	North Bondi						dis	disabled
Weath							r	authorised residents or other permit holders except
Survey	PF MC						bz	bus zone
_		_					tz	taxi zone
	Street From	То	Side of Stree	el Capacity	Restrictio	n	res	reserved parking
a	on site child care centre							
b	Clyde St outside child care centre		north		u			
L L	Clyde St outside next door to east		north		u			
d	Clyde St rest of east end of Clyde St		north		u		TEA	
e	Clyde St end	Oakes Pl	south		u		IN	184
f	Oakes Pl Clyde St	end	east		u		P.J	136 136A 138 138A
g	Oakes PI end	Clyde St	west		u		6	
h	Clyde St 2 houses west of Oakes Pl		south		u		Shorte .	
I	Clyde St 2 1/2 houses west of next doe	or	north		u		Sec.	
j	Clyde St outside next door to west		north		u		Cixipa	
k	Clyde St H	No 51	south		u		Kan	Clyde St Carlos Carlos
	Clyde St No 49	No 35	south		u		-	eixioa;
m	Clyde St No 33	Hardy St	south	13	u		100	chicago a
n	Clyde St Hardy St	No 108	north	11			- 101	Million Terror State
0	Clyde St No 110	No 128	north	15	u			
Р	Clyde St No 130	I	north	6	u	8	1	
q	Waratah lane	100m	east	3	u		57	
r	Waratah 100m	Murriverie R	north	5	u			
s	Murruveı Waratah St	100m	north	2	u		Map	Google
t	Murruvei 100m	end	north	8	u		1 6	
u	Military F 300m	300m	west	8	u		100 M	
v	Murruve: end	100m	south	3	u		Search	Where a Mit' Go 🔐
w	Murruvei 100m	Wairoa Av	south	4	u		21	Christeren n
x	Wairoa / Murriverie Rd	200m	east	6	u		5 3	
у	Wairoa / 200m	300m	east	6	u		5 3	
z	Wairoa / 300m	200m	west	9	u		[] =	
aa	Wairoa / 200m	Murriverie R	west	5	u			
ab	Murruveı Wairoa Av	Frederick St	south	8	u		-44	JT 41 Automation
ac	Frederick Murriverie Rd	300m	east	11	u			Murriverie Road
ad	Frederick 300m	Murriverie R	west	10	u			
ae	Murruveı Frederick St	Knowles Av	south	4	u			
af	Knowles Murriverie Rd	300m	east	3	u			
ag	Knowles 300m	Murriverie R			u			
-o ah	Murruvei Knowles Av	300m	south		u			
ai	Murruvei 300m	200m	north		u			
aj	Murruvei 200m	Waratah St			u u		1	
ak	Waratah Murriverie Rd	100m	west		u			
	Waratah 100m			5	~		1 Tom	O'Donned Street





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Job: 210210mcl (20_0661) Client: McLaren Traffic Engineering Day, date 23/02/21 Location: North Bondi Weather Fine Surveyor PF MC

				Parki	ng rou	ind co	mme	ncing.	••										
			Side																
Street	From	То	Stree	7:00	7.15	7.30	7.45	8.00	8:15	8.30	8.45	9.00	9.15	9.30	9.45	10.00	10:15	10.30	10.42
on site child ca		10	00100	0	0	0	0	0.00	0.15	0.50	0.15	0	0	0	0	0	0	0.50	0
Clyde St	outside child care cent	re	north	0	1	1	1	I	1	1	2	1	-	1	I	0	0	0	0
, Clyde St	outside next door to east		north	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
, Clyde St	rest of east end of Clyde St	end	north	2	2	3	3	3	4	5	4	4	3	3	3	3	3	3	3
Clyde St	end	Oakes Pl	south	4	4	4	2	I	2	2	2	I	I	I	I	I	I	I	I
Oakes Pl	Clyde St	end	east	2	2	2	I	I	2	2	3	3	3	2	I	I	I	2	2
Oakes Pl	end	Clyde St	west	I	I	I	2	2	2	2	4	3	I	2	2	2	2	2	2
Clyde St	2 houses west of Oakes Pl		south	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Clyde St	$2\ ^{1\!\!/_2}$ houses west of next door		north	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2
Clyde St	outside next door to west		north	I	I	I	I	I	I	I	I	2	2	2	2	2	2	2	I
Clyde St	н	No 51	south	6	6	6	6	5	3	5	5	5	2	2	2	4	4	4	4
Clyde St	No 49	No 35	south	14	14	14	5	5	4	4	4	6	7	I	I	I	2	2	2
Clyde St	No 33	Hardy St	south	8	8	8	6	6	6	7	9	4	6	7	7	7	7	7	7
Clyde St	Hardy St	No 108	north	16	16	16	3	3	6	5	6	6	7	I	I	2	2	2	2
Clyde St	No 110	No 128	north	3	3	3	4	4	3	4	6	3	4	3	I	I	I	I	I
Clyde St	No 130	I	north	I	I	I	5	5	5	5	5	5	5	2	2	2	2	2	2
Waratah St	lane	100m	east	2	2	I	I	I	2	3	3	4	3	2	2	3	3	4	4
Waratah St	100m	Murriverie Rd	north	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Murruverie Rd	Waratah St	100m	north	2	2	I	0	I	I	2	I	I	I	I	I	I	I	I	I
Murruverie Rd	100m	end	north	3	2	2	2	2	2	I	I	I	I	I	I	I	I	I	I
Military Rd	300m	300m	west	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8
Murruverie Rd	end	100m	south	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4
Murruverie Rd	100m	Wairoa Av	south	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Wairoa Av	Murriverie Rd	200m	east	10	8	8	7	7	7	7	8	8	8	8	7	7	7	6	7
Wairoa Av	200m	300m	east	12	10	10	9	9	8	8	7	6	6	6	6	6	5	5	5
Wairoa Av	300m	200m	west	8	7	7	6	6	6	5	5	5	5	6	6	6	5	5	5
Wairoa Av	200m	Murriverie Rd	west	7	7	6	6	6	6	6	6	6	6	7	6	6	6	4	5
Murruverie Rd	Wairoa Av	Frederick St	south	7	7	6	6	6	7	7	8	10	10	10	10	10	- 11	12	11
Frederick St	Murriverie Rd	300m	east	15	14	13	13	10	11	11	- 11	11	11	10	10	10	10	10	10
Frederick St	300m	Murriverie Rd	west	14	14	13	13	12	12	12	- 11	11	10	10	10	10	9	9	10
Murruverie Rd	Frederick St	Knowles Av	south	5	5	4	4	3	3	2	2	2	3	3	4	4	4	4	4
Knowles Av	Murriverie Rd	300m	east	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Knowles Av	300m	Murriverie Rd	west	3	3	3	3	2	2	2	3	3	3	3	3	3	3	3	3
Murruverie Rd	Knowles Av	300m	south	6	6	6	6	5	5	5	4	4	4	4	4	4	3	3	3
Murruverie Rd	300m	200m	north	7	7	6	6	6	6	6	5	5	5	4	4	4	5	5	5
Murruverie Rd	200m	Waratah St	north	6	6	6	6	6	6	6	6	4	4	4	5	5	5	5	5
Waratah St	Murriverie Rd	100m	west	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4
Waratah St	100m	lane	west	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Parking round commencing...

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Job: 210210mcl (20_0661) Client: McLaren Traffic Engineering Day, date 23/02/21 Location: North Bondi Weather Fine Surveyor PF MC

of Zone Street From То Stree 14:00 14:15 14:30 14:45 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15 17:30 17:45 18:00 18:15 18:30 18:45 19:00 19:15 19:30 19:45 on site child care centre Т I. Т Т Т Clyde St outside child care centre north Т Т Т T Clyde St outside next door to east north rest of east end of Clyde St I ı ī ī ī ī Clyde St end north Clyde St Oakes Pl south I. T I ī end Oakes Pl I I Clyde St end east I Т Т Oakes Pl end Clyde St west ī Clyde St 2 houses west of Oakes Pl south Clyde St north I I Т L T T 2 1/2 houses west of next doo Clyde St outside next door to west north Clyde St н No 51 south I I No 49 No 35 П П Clyde St south Ш Clyde St No 33 Hardy St south Clyde St No 108 Hardy St north Clyde St No 110 No 128 north Т No 130 T T Т Clyde St T north Т T Т I I ı. ī ī ī ī Waratah St lane 100m east ı Waratah St 100m Murriverie Rd north T Murruverie Rd Waratah St 100m north T I 100m I Murruverie Rd end north Т 300m 300m Military Rd west end 100m south Murruverie Rd Murruverie Rd 100m Wairoa Av south Wairoa Av Murriverie Rd 200m east 200m Wairoa Av 300m east Wairoa Av 300m 200m west 200m Wairoa Av Murriverie Rd west Murruverie Rd Wairoa Av Frederick St south Ш Ш П П П П П Frederick St Murriverie Rd 300m east П П П П Frederick St 300m Murriverie Rd west П Ш Ш П Murruverie Rd Frederick St Knowles Av south Knowles Av Murriverie Rd 300m east 300m Knowles Av Murriverie Rd west Murruverie Rd Knowles Av 300m south 300m north Δ 200m Murruverie Rd Murruverie Rd 200m Waratah St north Waratah St 100m T Murriverie Rd west Waratah St 100m lane west

Parking round commencing...

Side

Job: 210210mcl (20_0661) Client: McLaren Traffic Engineering Day, date 24/02/21 Location: North Bondi Weather Rain

Surveyor PF MC

				of																
Zone	Street	From	То	Stree	7:00	7:15	7:30	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15	0:30	10:45
а	on site child car	e centre			0	0	0	I	0	0	2	I	I	0	0	I	0	0	0	0
Ь	Clyde St	outside child care cent	re	north	0	0	0	0	0	0	2	0	2	0	I	I	I	I	I	I
с	Clyde St	outside next door to east		north	3	4	4	4	4	3	3	3	2	3	2	2	2	2	2	2
d	Clyde St	rest of east end of Clyde St	end	north	4	4	4	4	4	3	4	4	4	3	4	4	4	4	4	4
e	Clyde St	end	Oakes Pl	south	6	6	6	6	6	6	2	0	4	4	5	3	2	4	4	3
f	Oakes Pl	Clyde St	end	east	6	6	6	6	2	7	0	0	5	5	5	6	6	2	2	I
g	Oakes Pl	end	Clyde St	west	4	4	З	3	3	3	5	5	4	4	4	4	4	5	5	6
h	Clyde St	2 houses west of Oakes PI		south	3	3	3	3	3	3	0	0	3	3	3	3	3	2	2	2
I.	Clyde St	$2\ ^{\prime \! \prime _2}$ houses west of next door		north	2	2	2	2	2	2	0	0	4	4	4	4	4	2	2	2
j	Clyde St	outside next door to west		north	2	2	2	2	2	2	I	Ι	0	0	0	0	0	0	0	0
k	Clyde St	н	No 51	south	7	7	7	7	7	7	3	3	Ι	I	I	I	I	4	4	3
I.	Clyde St	No 49	No 35	south	16	16	15	П	12	П	8	8	4	4	4	3	3	5	5	5
m	Clyde St	No 33	Hardy St	south	21	20	20	17	Π	10	9	9	12	12	П	14	14	15	15	15
n	Clyde St	Hardy St	No 108	north	0	0	0	0	2	2	2	2	I	Т	I	3	3	2	2	2
ο	Clyde St	No 110	No 128	north	0	0	-	I	Ι	0	Ι	I	0	0	0	Ι	I	I	I	I
Р	Clyde St	No 130	I	north	5	5	4	3	2	2	4	4	2	2	2	3	3	3	3	3
q	Waratah St	lane	100m	east	I	I	Ι	I	Ι	I	Ι	I	2	2	2	2	2	3	2	2
r	Waratah St	100m	Murriverie Rd	north	6	6	6	6	6	6	6	6	5	5	4	4	4	4	4	4
s	Murruverie Rd	Waratah St	100m	north	2	2	2	2	2	2	2	2	2	2	Ι	Ι	I	0	0	0
t	Murruverie Rd	100m	end	north	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
u	Military Rd	300m	300m	west	7	7	6	6	5	5	5	6	6	6	7	7	7	7	7	7
v	Murruverie Rd	end	100m	south	6	6	6	6	6	5	5	5	6	6	6	6	6	6	6	6
w	Murruverie Rd	100m	Wairoa Av	south	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4
x	Wairoa Av	Murriverie Rd	200m	east	7	7	6	6	5	5	4	4	5	5	5	5	5	5	5	5
у	Wairoa Av	200m	300m	east	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3
z	Wairoa Av	300m	200m	west	8	8	8	7	7	7	7	6	5	5	6	6	6	6	6	6
aa	Wairoa Av	200m	Murriverie Rd	west	6	6	6	6	6	6	5	5	4	4	4	4	4	3	2	3
ab	Murruverie Rd	Wairoa Av	Frederick St	south	8	8	7	6	6	6	7	8	9	8	7	7	7	8	8	8
ac	Frederick St	Murriverie Rd	300m	east	9	10	10	9	9	8	8	9	9	10	9	12	11	П	10	10
ad	Frederick St	300m	Murriverie Rd	west	13	13	П	10	9	10	12	12	12	12	П	П	10	10	8	8
ae	Murruverie Rd	Frederick St	Knowles Av	south	5	5	4	4	3	3	3	3	3	3	4	4	4	4	4	4
af	Knowles Av	Murriverie Rd	300m	east	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3
ag	Knowles Av	300m	Murriverie Rd	west	3	3	2	2	I	2	2	2	2	2	2	2	2	2	2	2
ah	Murruverie Rd	Knowles Av	300m	south	6	6	6	6	6	5	5	5	4	4	4	4	4	3	3	3
ai	Murruverie Rd	300m	200m	north	5	5	5	6	6	5	4	5	6	5	5	4	4	3	3	3
aj	Murruverie Rd	200m	Waratah St	north	6	6	7	7	7	8	8	8	7	7	6	6	6	6	6	6
ak	Waratah St	Murriverie Rd	100m	west	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
aL	Waratah St	100m	lane	west	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Parking round commencing...

Side

 Job:
 210210mcl (20_0661)

 Client:
 McLaren Traffic Engineering

 Day, date:
 24/02/21

 Location:
 North Bondi

 Weather:
 Fine

 Surveyor:
 PF MC

Parking round commencing... Side

Zone	Street	From	То
a	on site child ca		
b	Clyde St	outside child care ce	entre
с	, Clyde St	outside next door to east	
d	, Clyde St	rest of east end of Clyde St	end
e	, Clyde St	end	Oakes Pl
f	, Oakes Pl	Clyde St	end
g	Oakes Pl	end	Clyde St
h	Clyde St	2 houses west of Oakes Pl	
I	Clyde St	2 1/2 houses west of next doc	or
j	Clyde St	outside next door to west	
k	Clyde St	н	No 51
I	Clyde St	No 49	No 35
m	Clyde St	No 33	Hardy St
n	Clyde St	Hardy St	No 108
0	Clyde St	No 110	No 128
Р	Clyde St	No 130	I
q	Waratah St	lane	100m
r	Waratah St	100m	Murriverie
S	Murruverie Rd	Waratah St	100m
t	Murruverie Rd	100m	end
u	Military Rd	300m	300m
v	Murruverie Rd	end	100m
w	Murruverie Rd	100m	Wairoa A
x	Wairoa Av	Murriverie Rd	200m
у	Wairoa Av	200m	300m
z	Wairoa Av	300m	200m
aa	Wairoa Av	200m	Murriverie R
ab	Murruverie Rd	Wairoa Av	Frederick
ac	Frederick St	Murriverie Rd	300m
ad	Frederick St	300m	Murriverie R
ae	Murruverie Rd	Frederick St	Knowles <i>i</i>
af	Knowles Av	Murriverie Rd	300m
ag	Knowles Av	300m	Murriverie
ah	Murruverie Rd	Knowles Av	300m
ai	Murruverie Rd	300m	200m
aj	Murruverie Rd	200m	Waratah
ak	Waratah St	Murriverie Rd	100m
aL	Waratah St	100m	lane

	Side																								
	of																								
	Stree	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45
		0	0	0	0	0	0	0	0	0	0	Т	2	0	Т	0	0	0	0	0	0	0	0	0	0
	north	0	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	north	I	2	I	I	7	5	5	4	4	3	3	3	2	2	2	3	4	4	4	4	I	Т	Т	I
	north	3	4	5	5	5	4	4	3	3	3	5	4	4	4	4	5	4	4	4	5	2	3	3	3
I	south	3	2	2	2	2	2	3	3	2	I	2	2	2	2	2	2	2	I	2	2	4	4	5	5
	east	I	I	I	I	2	I	Ι	I	I	I	2	2	3	3	3	5	5	5	5	4	3	3	3	3
	west	I	I	I	2	2	3	3	3	2	3	3	3	4	3	3	5	5	5	5	4	Т	Т	Т	Т
	south	0	0	0	2	3	3	2	2	2	2	2	2	2	I	I	I	Ι	I	I	Т	I	I	I	Т
	north	I	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2
	north	0	0	0	0	0	0	0	0	0	0	0	0	Ι	I	I	I	Ι	I	I	I	I	I	I	I
	south	4	4	4	0	0	0	0	0	0	0	5	4	4	4	4	4	4	4	8	8	8	8	9	9
	south	14	14	4	4	4	3	3	3	4	4	8	8	7	7	7	8	8	8	8	10	П	П	П	П
St	south	11	П	П	14	14	13	13	13	13	13	8	7	9	9	9	9	9	10	10	П	П	П	П	П
8	north	1	I	I	0	0	0	0	0	0	0	0	0	2	2	2	Т	I	0	0	0	2	3	3	3
8	north	I	1	I	0	0	0	0	0	0	0	2	2	0	0	0	I	I	I	0	I	0	I	I	I
	north	I	1	I	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	I	2	6	6	6	6
	east	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3
erie Rd	north	2	2	2	3	3	3	3	3	3	I	I	I	I	I	3	4	3	3	3	3	3	3	3	3
	north	2	2	I	I	I	I	I	Т	I	I	I	I	I	2	I	Т	I	I	I	I	I	I	I	2
	north	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3
	west	8	8	8	7	7	6	6	6	6	6	6	6	6	6	7	8	8	8	8	8	8	8	7	7
	south	3	3	3	3	3	3	2	2	3	3	4	4	4	4	3	2	3	3	3	4	4	5	6	6
a Av	south	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
	east	3	3	3	3	3	3	3	3	5	7	8	6	6	5	6	6	7	7	9	9	9	9	9	9
	east	3	3	3	3	4	4	3	3	3	4	4	5	5	5	6	7	7	7	7	7	7	7	7	7
	west	6	6	6	6	7	6	6	7	6	6	6	7	7	8	7	6	6	6	6	7	8	9	10	10
rie Rd	west	5	5	5	4	4	5	5	6	5	4	4	4	4	4	4	3	6	6	7	7	7	4	5	5
ick St	south	8	8	8	7	6	7	7	8	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	9
	east	10	10	10	10	10	10	10	10	10	10	10	10	9	9	П	12	13	13	13	13	13	13	13	13
rie Rd	west	10	11	П	П	П	П	11	П	11	12	12	12	12	12	13	14	13	13	13	14	15	16	15	15
es Av	south	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	7	7	7
	east	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
erie Rd	west	I	I	I	2	2	3	4	4	3		3	3	3	3	3		3	3	3	3	3	3	3	3
	south	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	north	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	7	7	7	7	7	7	7	7	6
ah St	north	4	4	4	3	3	4	5	5	5	5	5	6	7	7	7	8	6	6	6	7	8	9	9	9
	west	4	4	4	4	3	3	3	3	3	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3
	west	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Job: 210210mcl (20_0661) Client: McLaren Traffic Engineering Day, date 25/02/21 Location: North Bondi Weather: Fine

Surveyor PF MC

Zone Street From To Stree 7:0 7:15 7:30 7:45 8:00 8:15 8:30 8:45 9:00 9:15 9:30 9:45 10:00 10:15 10:30 10:44 a on site child care centre outside child care centre 0
b Clyde St outside child care centre north 0 1 <th1< th=""> <th1< th=""> 1</th1<></th1<>
c Clyde St outside next door to east north 2 <th2< th=""> <th2< th=""> 2</th2<></th2<>
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f Oakes Pl Clyde St end east 6 6 5 4 4 7 7 6 6 6 5 4 g Oakes Pl end Clyde St west 4 4 4 3 3 3 3 2 2 2 2 3 3 h Clyde St 2 houses west of Oakes Pl south 2 2 7 7 7 7 5 5 3
g Oakes Pl end Clyde St west 4 4 4 3 3 3 3 2 2 2 2 3 3 h Clyde St 2 houses west of Oakes Pl south 2 2 7 7 7 7 7 5 5 3
h Clyde St 2 houses west of Oakes Pl south 2 2 7 7 7 7 5 3
I Clyde St 2 ½ houses west of next door north 2 2 7 7 7 7 7 7 7 7 5 5 5 5 4 4
j Clyde St outside next door to west north I I 7 7 7 7 7 7 6 5 5 5 3 3
k Clyde St H No 51 south 7 7 7 7 7 7 7 6 6 7 6 6 7 10 9
I Clyde St No 49 No 35 south 7 7 7 6 6 6 6 6 7 7 10 10 10 3 8 7
m Clyde St No 33 Hardy St south 14 14 14 14 14 14 11 2 2 3 6 6 6 4 4
n Clyde St Hardy St No 108 north 3 3 3 3 3 3 3 3 3 3 3 2 2 2 1 2 2
o Clyde St No I 10 No I 28 north 2 2 4 4 5 5 3 3 I I I 0 2 2
p Clyde St No 130 I north 2 2 2 3 3 3 3 2 2 3 3 3 2 2 2 2
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r Waratah St 100m Murriverie Rd north 5 5 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5
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w Murruverie Rd 100m Wairoa Av south 5 5 6 4 4 4 5 4 4 3 3 4
x Wairoa Av Murriverie Rd 200m east 9 9 9 8 8 8 7 7 7 7 6 6 6 6 6
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z Wairoa Av 300m 200m west 9 9 9 7 7 6 6 6 6 6 6 6 6 6 6 6 6 6
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ak Waratah St Murriverie Rd 100m west 5 5 5 5 5 4 4 4 4 3 3
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Parking round commencing...

Side

 Job:
 210210mcl (20_0661)

 Client:
 McLaren Traffic Engineering

 Day, date
 25/02/21

 Location:
 North Bondi

 Weather:
 Fine

 Surveyor
 PF MC

Parking round commencing... Side

				of
Zone	Street	From	То	Street
а	on site child ca	re centre		
Ь	Clyde St	outside child care centr	e	north
с	Clyde St	outside next door to east		north
d	Clyde St	rest of east end of Clyde St	end	north
e	Clyde St	end	Oakes Pl	south
f	Oakes Pl	Clyde St	end	east
g	Oakes Pl	end	Clyde St	west
h	Clyde St	2 houses west of Oakes Pl		south
I	Clyde St	$2 \ \ensuremath{{}^{1\!\!\!/}_{\!\! 2}}$ houses west of next door		north
j	Clyde St	outside next door to west		north
k	Clyde St	н	No 51	south
I	Clyde St	No 49	No 35	south
m	Clyde St	No 33	Hardy St	south
n	Clyde St	Hardy St	No 108	north
0	Clyde St	No 110	No 128	north
Ρ	Clyde St	No 130	I.	north
P	Waratah St	lane	100m	east
r	Waratah St	100m	Murriverie Rd	north
s	Murruverie Rd	Waratah St	100m	north
t	Murruverie Rd	100m	end	north
u	Military Rd	300m	300m	west
v	Murruverie Rd	end	100m	south
w	Murruverie Rd	100m	Wairoa Av	south
x	Wairoa Av	Murriverie Rd	200m	east
у	Wairoa Av	200m	300m	east
z	Wairoa Av	300m	200m	west
aa	Wairoa Av	200m	Murriverie Rd	west
ab	Murruverie Rd	Wairoa Av	Frederick St	south
ac	Frederick St	Murriverie Rd	300m	east
ad	Frederick St	300m	Murriverie Rd	west
ae	Murruverie Rd	Frederick St	Knowles Av	south
af	Knowles Av	Murriverie Rd	300m	east
ag	Knowles Av	300m	Murriverie Rd	west
ah	Murruverie Rd	Knowles Av	300m	south
ai	Murruverie Rd	300m	200m	north
aj	Murruverie Rd	200m	Waratah St	north
ak	Waratah St	Murriverie Rd	100m	west
aL	Waratah St	100m	lane	west

north 2 2 2 2 1 2 2 2 1 2 2 2 1 1 1 1 1 2 2 2 1 <th></th> <th>Street</th> <th>14:00</th> <th>14:15</th> <th>14:30</th> <th>14:45</th> <th>15:00</th> <th>15:15</th> <th>15:30</th> <th>15:45</th> <th>16:00</th> <th>16:15</th> <th>16:30</th> <th>16:45</th> <th>17:00</th> <th>17:15</th> <th>17:30</th> <th>17:45</th> <th>18:00</th> <th>18:15</th> <th>18:30</th> <th>18:45</th> <th>19:00</th> <th>19:15</th> <th>19:30</th> <th>19:45</th>		Street	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45
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east i		north	3	3	5	5	5	6	6	4	4	4	4	3	3	3	3	3	3	2	2	2	2	3	2	3
wess 3 3 3 3 2		south	2	3	3	3	4	3	2	5	5	6	7	I	I	I	I	I	I	2	2	2	2	2	2	2
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Incr	k St	south	7	7	7	7	7	6	6	5	5	5	5	5	6	6	6	6	6	6	5	5	6	8	8	8
a Av south 2 3 3 4<		east	12	12	12	Ш	Ш	10	10	10	10	10	10	10	10	10	10	10	10	12	14	14	14	14	14	13
east 4 4 44 4 3 3 2 2 2 2 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 <td>e Rd</td> <td>west</td> <td>- 11</td> <td>Ш</td> <td>Ш</td> <td>Ш</td> <td>10</td> <td>10</td> <td>10</td> <td>12</td> <td>12</td> <td>13</td> <td>Ш</td> <td>П</td> <td>10</td> <td>10</td> <td>Ш</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> <td>П</td> <td>14</td> <td>15</td> <td>16</td> <td>16</td>	e Rd	west	- 11	Ш	Ш	Ш	10	10	10	12	12	13	Ш	П	10	10	Ш	12	12	12	12	П	14	15	16	16
ie Rd west 4 4 3 3 3 3 3 4 4 4 4 3 3 3 4 4 4 4 3 3 3 3 3 4 4 4 4 4 4 4 4 4 3 3 3 4 4 4 4 4 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 5 6 6 6 5 7<	s Av	south	2	2	2	2	2	2	2	2	2	3	4	4	3	3	4	4	4	4	4	4	4	4	4	4
south 4 4 4 4 4 5 5 5 6 5 5 5 5 4 5 5 6 6 6 6 6 6 6 6 5 5 5 5 5 5 5 6 5 5 5 5 6 7 <td></td> <td>east</td> <td>4</td> <td>4</td> <td>4</td> <td>44</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>4</td>		east	4	4	4	44	4	3	3	2	2	2	2	2	3	3	4	4	4	4	4	4	4	4	4	4
north 5 5 5 5 8 9 8 9 9 7 8 8 9 8 7 6 7 7 7 7 1 St north 8 8 7 6 5 5 5 5 4 4 4 6 7 8 8 8 9 8 7 6 7 7 7 7 north 8 8 7 6 6 5 4 4 4 6 7 8 6 6 6 5 6 8 9	ie Rd	west	4	4	4	3	3	3	3	4	4	4	4	4	4	3	3	3	4	4	3	3	3	4	4	4
North 8 8 7 6 6 5 4 4 4 6 7 8 6 6 5 5 6 8 9 <td></td> <td>south</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>6</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> <td>4</td> <td>5</td> <td>5</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>5</td>		south	4	4	4	4	4	4	5	5	5	5	6	5	5	5	5	5	4	5	5	6	6	6	6	5
west 4 4 3 3 3 3 4 4 4 3 2 3 4 5		north	5	5	5	5	5	8	9	8	8	9	9	9	7	8	8	8	9	8	7	6	7	7	7	7
	n St	north	8	8	7	6	6	5	4	4	4	4	6	7	8	6	6	6	5	5	6	8	9	9	9	9
west 3 5 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4		west	4	4	3	3	3	3	3	4	4	4	3	2	3	4	5	5	5	5	5	5	5	5	5	5
		west	3	5	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4



ANNEXURE C: PARKING SURVEY DATA

GRAPHICAL SUMMARY (4 SHEETS)

TC/TEAV.01/22.04- Attachment 1

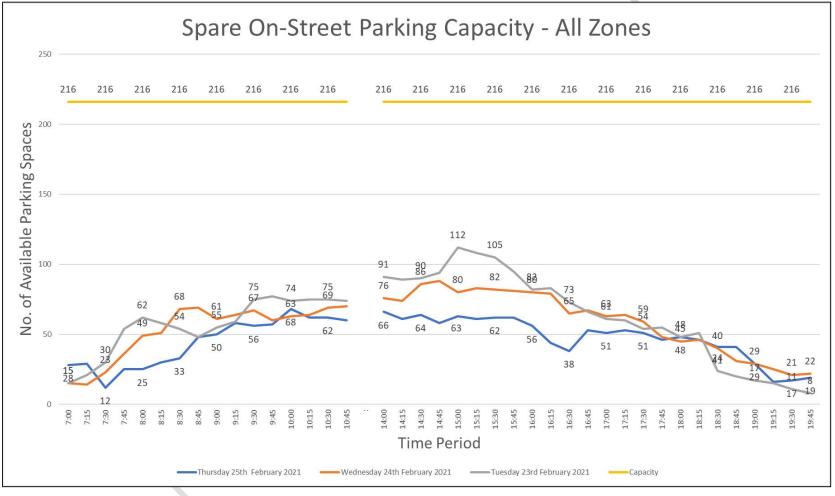
Annexure C Clyde Street, North Bondi



Job No: 2020/0661 May 2021

1

ANNEXURE C: SURVEY DATA – GRAPHICAL SUMAMRY

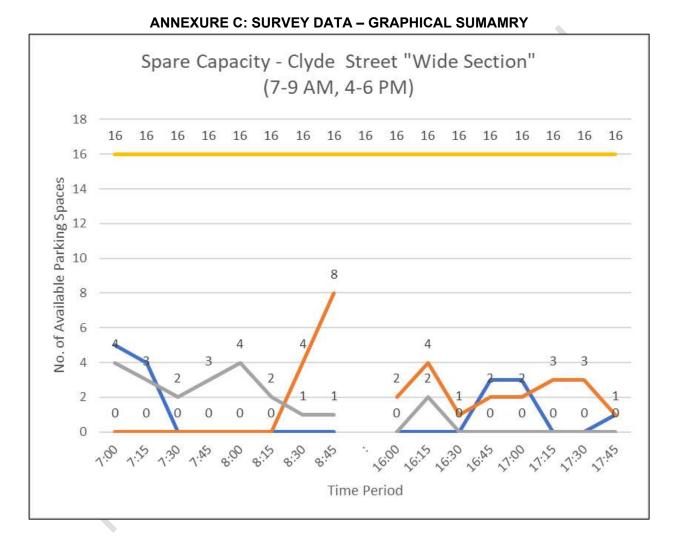




Annexure C Clyde Street, North Bondi



Job No: 2020/0661 May 2021



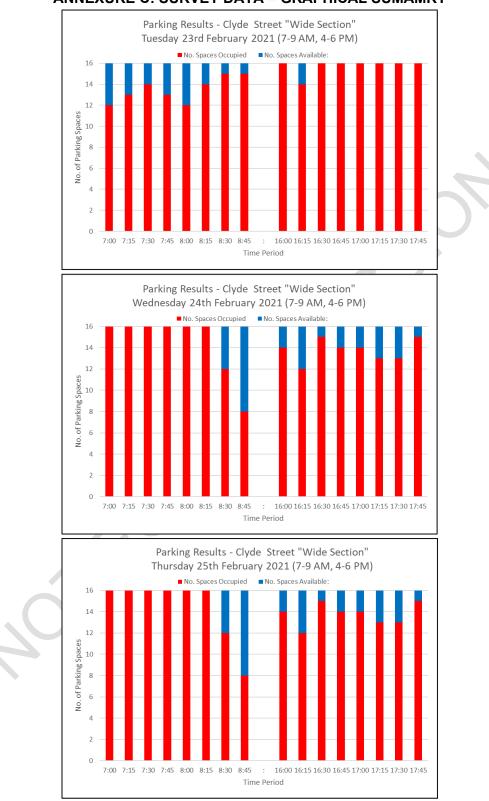
McLaren Traffic Engineering Shop 7, 716-720 Old Princes Hwy, Sutherland NSW 2232 Ph 61-2-8355-2440

Annexure C

Clyde Street, North Bondi



Job No: 2020/0661 May 2021



ANNEXURE C: SURVEY DATA - GRAPHICAL SUMAMRY



ANNEXURE D: INTERSECTION SURVEY RESULTS

(1 SHEET)

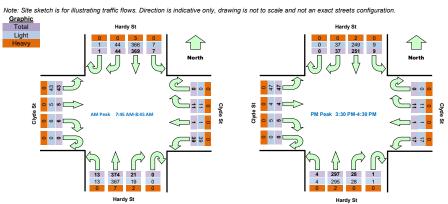
TRANS TRAFFIC SURVEY DNV-GL DNV-C

GPS	-33.88107, 151.27706						
Date:	Tue 22/09/20	N	lorth:	Hardy St	Survey	AM:	7:00 AM-9:00 AM
Weather:	Overcast	E	ast:	Clyde St	Period	PM:	2:30 PM-6:00 PM
Suburban:	North Bondi	S	South:	Hardy St	Traffic	AM:	7:45 AM-8:45 AM
Customer:	McLaren	W	Vest:	Clyde St	Peak	PM:	3:30 PM-4:30 PM

All Vehicles																			
	ime			ach Hard				ach Clyde				ach Hardy			est Appro				y Total
Period Start	t Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	Hour	Peak
7:00	7:15	0	1	23	2	0	0	0	4	0	6	25	0	0	0	0	0	570	
7:15	7:30	1	8	54	1	0	3	0	4	0	3	37	0	0	0	0	6	740	
7:30	7:45	1	10	79	3	0	1	0	11	0	4	46	3	0	2	0	5	879	
7:45	8:00	0	9	107	2	0	2	1	11	0	3	81	4	0	0	0	7	934	Peak
8:00	8:15	1	11	86	1	0	3	0	6	0	4	98	2	0	4	0	15	922	
8:15	8:30	0	12	95	1	0	2	0	16	0	10	99	5	0	0	1	15		
8:30	8:45	0	12	81	3	0	4	0	6	0	4	96	2	0	2	4	6		
8:45	9:00	1	12	66	2	0	4	0	7	0	9	96	3	0	0	1	14		
14:30	14:45	0	6	69	0	0	0	0	3	0	3	60	5	0	3	0	7	610	
14:45	15:00	1	3	58	0	0	1	0	5	0	5	51	3	0	2	1	9	657	
15:00	15:15	0	4	58	0	0	4	0	4	0	13	54	2	0	1	1	4	668	
15:15	15:30	0	9	57	5	0	0	0	12	1	7	62	3	0	0	2	12	710	
15:30	15:45	0	14	80	1	0	2	0	3	1	7	77	1	0	2	1	14	712	Peak
15:45	16:00	0	7	66	3	0	2	0	5	0	3	51	2	0	0	0	11	663	
16:00	16:15	0	8	54	1	0	3	0	4	0	8	92	0	0	3	1	13	662	
16:15	16:30	0	8	51	4	0	4	1	5	0	10	77	1	0	0	2	9	643	
16:30	16:45	0	4	43	3	0	3	1	5	0	5	74	1	0	2	2	11	664	
16:45	17:00	0	11	50	2	0	1	1	5	0	7	58	1	0	1	1	11	674	
17:00	17:15	0	6	48	4	0	6	0	11	0	12	71	0	0	0	1	9	662	
17:15	17:30	0	11	50	2	0	2	0	10	0	12	94	0	0	1	3	8		
17:30	17:45	0	4	46	1	0	2	2	3	0	9	82	1	0	0	1	13		
17:45	18:00	1	4	44	2	0	0	0	9	0	4	66	2	0	0	0	5		
Poak	Time	No	rth Appro	ach Hard		E	et Annro	ach Clyde	St.			ach Hardy	C+		est Appro	ach Clude	S 6+	Peak	1
	t Period End	U	R	SB	y Si	U E4	R	WB		U 30	R	NB	L	U	R	EB	50 L	total	1
7:45		1	44	260	7	0	11	1	20	0	21	274	12	0	6	6	42	024	ł

Period Star	t Period End	U	I R	SB	L	U	R	WB	L	U	R	NB	L	0	R	EB	L	total
7:45	8:45	1	44	369	7	0	11	1	39	0	21	374	13	0	6	5	43	934
15:30	16:30	0	37	251	9	0	11	1	17	1	28	297	4	0	5	4	47	712

ection is indicative only, drawing is not to scale and not an exact streets configuration ating traf fic flows. Di





ANNEXURE E: SIDRA RESULTS

(4 SHEETS)

Site: 01 [EXAM - Clyde Street / Hardy Street (Site Folder: General)]

Clyde Street / Hardy Street North Bondi, NSW - Job Ref: 200661 Exisiting AM Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance Mov. Turn INPUT DEMAND Deg. Aver. Level of 95% BACK OF Prop. Effective Aver. Aver.														
Mov ID	Turn	INP VOLU [Total		DEM/ FLO [Total		Deg. Satn		Level of Service	95% BA QUE [Veh.		Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
0 11		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South		ly Street	. ,											
1	L2	13	0	14	0.0	0.232	6.1	LOS A	0.3	2.1	0.08	0.05	0.08	49.0
2	T1	374	7	394	1.9	0.232	0.2	LOS A	0.3	2.1	0.08	0.05	0.08	49.5
3	R2	21	2	22	9.5	0.232	6.7	LOS A	0.3	2.1	0.08	0.05	0.08	48.4
Appro	oach	408	9	429	2.2	0.232	0.7	NA	0.3	2.1	0.08	0.05	0.08	49.4
East:	Clyde	Street (E	E)											
4	L2	39	0	41	0.0	0.069	5.9	LOS A	0.2	1.7	0.48	0.65	0.48	45.0
5	T1	1	0	1	0.0	0.069	8.8	LOS A	0.2	1.7	0.48	0.65	0.48	45.1
6	R2	11	0	12	0.0	0.069	12.2	LOS B	0.2	1.7	0.48	0.65	0.48	44.6
Appro	oach	51	0	54	0.0	0.069	7.4	LOS A	0.2	1.7	0.48	0.65	0.48	44.9
North	n: Hard	y Street ((N)											
7	L2	7	0	7	0.0	0.245	6.4	LOS A	0.5	3.7	0.15	0.07	0.15	48.7
8	T1	369	3	388	0.8	0.245	0.4	LOS A	0.5	3.7	0.15	0.07	0.15	49.2
9	R2	45	0	47	0.0	0.245	6.5	LOS A	0.5	3.7	0.15	0.07	0.15	48.2
Appro	oach	421	3	443	0.7	0.245	1.1	NA	0.5	3.7	0.15	0.07	0.15	49.1
West	: Clyde	e Street (W)											
10	L2	43	0	45	0.0	0.067	6.0	LOS A	0.2	1.7	0.47	0.65	0.47	45.3
11	T1	5	0	5	0.0	0.067	8.8	LOS A	0.2	1.7	0.47	0.65	0.47	45.3
12	R2	6	0	6	0.0	0.067	12.2	LOS B	0.2	1.7	0.47	0.65	0.47	44.9
Appro	oach	54	0	57	0.0	0.067	6.9	LOS A	0.2	1.7	0.47	0.65	0.47	45.2
All Vehic	cles	934	12	983	1.3	0.245	1.6	NA	0.5	3.7	0.16	0.13	0.16	48.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road 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.

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V Site: 01 [EXPM - Clyde Street / Hardy Street (Site Folder: General)]

Clyde Street / Hardy Street North Bondi, NSW - Job Ref: 200661 Exisiting AM Site Category: (None) Give-Way (Two-Way)

Mov ID	Turn	INP VOLU [Total veh/h		DEMA FLO [Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUE [Veh. veh		Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Haro													
1	L2	4	0	4	0.0	0.186	5.6	LOS A	0.3	1.9	0.09	0.06	0.09	49.0
2	T1	297	2	313	0.7	0.186	0.1	LOS A	0.3	1.9	0.09	0.06	0.09	49.4
3	R2	29	0	31	0.0	0.186	5.7	LOS A	0.3	1.9	0.09	0.06	0.09	48.5
Appr	oach	330	2	347	0.6	0.186	0.7	NA	0.3	1.9	0.09	0.06	0.09	49.3
East:	Clyde	Street (E	E)											
4	L2	17	0	18	0.0	0.038	5.4	LOS A	0.1	0.9	0.41	0.61	0.41	45.3
5	T1	1	0	1	0.0	0.038	6.6	LOS A	0.1	0.9	0.41	0.61	0.41	45.3
6	R2	11	0	12	0.0	0.038	9.4	LOS A	0.1	0.9	0.41	0.61	0.41	44.8
Appr	oach	29	0	31	0.0	0.038	6.9	LOS A	0.1	0.9	0.41	0.61	0.41	45.1
North	n: Harc	ly Street ((N)											
7	L2	9	0	9	0.0	0.171	5.7	LOS A	0.4	2.6	0.14	0.09	0.14	48.7
8	T1	251	2	264	0.8	0.171	0.3	LOS A	0.4	2.6	0.14	0.09	0.14	49.1
9	R2	37	0	39	0.0	0.171	5.8	LOS A	0.4	2.6	0.14	0.09	0.14	48.2
Appr	oach	297	2	313	0.7	0.171	1.1	NA	0.4	2.6	0.14	0.09	0.14	49.0
West	: Clyd	e Street (\	W)											
10	L2	47	0	49	0.0	0.057	5.6	LOS A	0.2	1.5	0.39	0.59	0.39	45.8
11	T1	4	0	4	0.0	0.057	6.7	LOS A	0.2	1.5	0.39	0.59	0.39	45.8
12	R2	5	0	5	0.0	0.057	9.1	LOS A	0.2	1.5	0.39	0.59	0.39	45.3
Appr	oach	56	0	59	0.0	0.057	6.0	LOS A	0.2	1.5	0.39	0.59	0.39	45.7
All Vehic	cles	712	4	749	0.6	0.186	1.5	NA	0.4	2.6	0.15	0.13	0.15	48.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road 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.

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V Site: 01 [FUAM - Clyde Street / Hardy Street (Site Folder: General)]

Clyde Street / Hardy Street North Bondi, NSW - Job Ref: 200661 Future AM Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance Mov Turn INPUT DEMAND Deg. Aver. Level of 95% BACK OF Prop. Effective Aver. Aver.														
Mov ID	Turn	INP VOLU [Total veh/h		DEMA FLO ^V [Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUE [Veh. veh		Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Haro	dy Street	(S)											
1	L2	13	0	14	0.0	0.238	6.2	LOS A	0.4	2.7	0.11	0.06	0.11	48.9
2	T1	374	7	394	1.9	0.238	0.2	LOS A	0.4	2.7	0.11	0.06	0.11	49.4
3	R2	28	2	29	7.1	0.238	6.7	LOS A	0.4	2.7	0.11	0.06	0.11	48.3
Appro	oach	415	9	437	2.2	0.238	0.9	NA	0.4	2.7	0.11	0.06	0.11	49.3
East:	Clyde	Street (E	E)											
4	L2	46	0	48	0.0	0.081	6.0	LOS A	0.3	2.0	0.48	0.66	0.48	45.0
5	T1	1	0	1	0.0	0.081	9.0	LOS A	0.3	2.0	0.48	0.66	0.48	45.0
6	R2	13	0	14	0.0	0.081	12.5	LOS B	0.3	2.0	0.48	0.66	0.48	44.6
Appro	oach	60	0	63	0.0	0.081	7.4	LOS A	0.3	2.0	0.48	0.66	0.48	44.9
North	n: Hard	ly Street ((N)											
7	L2	9	0	9	0.0	0.246	6.4	LOS A	0.5	3.8	0.15	0.07	0.15	48.7
8	T1	369	3	388	0.8	0.246	0.4	LOS A	0.5	3.8	0.15	0.07	0.15	49.2
9	R2	45	0	47	0.0	0.246	6.5	LOS A	0.5	3.8	0.15	0.07	0.15	48.2
Appro	oach	423	3	445	0.7	0.246	1.1	NA	0.5	3.8	0.15	0.07	0.15	49.1
West	: Clyde	e Street (\	W)											
10	L2	43	0	45	0.0	0.068	6.0	LOS A	0.2	1.7	0.47	0.65	0.47	45.2
11	T1	5	0	5	0.0	0.068	8.9	LOS A	0.2	1.7	0.47	0.65	0.47	45.3
12	R2	6	0	6	0.0	0.068	12.4	LOS B	0.2	1.7	0.47	0.65	0.47	44.8
Appro	oach	54	0	57	0.0	0.068	7.0	LOS A	0.2	1.7	0.47	0.65	0.47	45.2
All Vehic	les	952	12	1002	1.3	0.246	1.7	NA	0.5	3.8	0.17	0.14	0.17	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road 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.

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∇ Site: 01 [FUPM - Clyde Street / Hardy Street (Site Folder: General)]

Clyde Street / Hardy Street North Bondi, NSW - Job Ref: 200661 Future PM Site Category: (None) Give-Way (Two-Way)

Mov ID	Turn	INP VOLU [Total veh/h		DEMA FLO [Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUI [Veh. veh		Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: Haro	dy (S)												
1	L2	4	0	4	0.0	0.190	5.6	LOS A	0.3	2.3	0.10	0.06	0.10	48.9
2	T1	297	2	313	0.7	0.190	0.2	LOS A	0.3	2.3	0.10	0.06	0.10	49.4
3	R2	34	0	36	0.0	0.190	5.7	LOS A	0.3	2.3	0.10	0.06	0.10	48.4
Appro	oach	335	2	353	0.6	0.190	0.8	NA	0.3	2.3	0.10	0.06	0.10	49.2
East:	Clyde	Street (E	E)											
4	L2	23	0	24	0.0	0.048	5.4	LOS A	0.2	1.2	0.40	0.61	0.40	45.3
5	T1	1	0	1	0.0	0.048	6.7	LOS A	0.2	1.2	0.40	0.61	0.40	45.3
6	R2	13	0	14	0.0	0.048	9.5	LOS A	0.2	1.2	0.40	0.61	0.40	44.9
Appro	oach	37	0	39	0.0	0.048	6.9	LOS A	0.2	1.2	0.40	0.61	0.40	45.1
North	n: Hard	y Street ((N)											
7	L2	11	0	12	0.0	0.172	5.7	LOS A	0.4	2.6	0.14	0.09	0.14	48.6
8	T1	251	2	264	0.8	0.172	0.3	LOS A	0.4	2.6	0.14	0.09	0.14	49.1
9	R2	37	0	39	0.0	0.172	5.8	LOS A	0.4	2.6	0.14	0.09	0.14	48.2
Appro	oach	299	2	315	0.7	0.172	1.1	NA	0.4	2.6	0.14	0.09	0.14	49.0
West	: Clyde	e Street (\	W)											
10	L2	47	0	49	0.0	0.057	5.6	LOS A	0.2	1.5	0.39	0.59	0.39	45.8
11	T1	4	0	4	0.0	0.057	6.8	LOS A	0.2	1.5	0.39	0.59	0.39	45.8
12	R2	5	0	5	0.0	0.057	9.3	LOS A	0.2	1.5	0.39	0.59	0.39	45.3
Appro	oach	56	0	59	0.0	0.057	6.0	LOS A	0.2	1.5	0.39	0.59	0.39	45.7
All Vehic	les	727	4	765	0.6	0.190	1.7	NA	0.4	2.6	0.16	0.14	0.16	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road 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.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: MCLAREN TRAFFIC ENGINEERING | Licence: PLUS / 1PC | Processed: Wednesday, 5 May 2021 4:19:16 PM Project: \\mteserver\mte storage\Jobs\2020\200661\MTE SIDRA\Clyde Street North Bondi.sip9



ANNEXURE F: PARENT & STAFF TRAVEL MODE SURVEY RESULTS

(17 SHEETS)

		Drth Bondi	g monday /	regiver Travel M Tuesday / Wedne Date:	esday / Thursday /	Friday (Please Circle)	Job No: 2020/661 February 2021
				1	ge: 1 of 3		
Respondent	Time	How did you get to the Child Care Centre this morning?	If you drove this morning, where did you park your car?		If you walked, did you use the pedestrian link from Murriverie Road? (See picture if	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10-	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the morning?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey - AM (Parent Drop-Off)

Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle)

Date:

Page: 2 of 3

Respondent	Time	How did you get to the Child Care Centre this morning?	If you drove this morning, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the morning?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey - AM (Parent Drop-Off)

Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle)

Date:

Page: 3 of 3

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	treet, North	Bondi		Tra	file Engineering	and the second second	Job No: 2020/661 February 2021
		Day	/: Monday / Tu	giver Travel Moo lesday / Wedneso te:	day (Thursday / I	Parent Pick-Up) Friday (Please Circle)	
					e: 1 of 3	 6- -	
Respondent	Time	How did you get to the Child Care Centre this afternoon?	If you drove this afternoon, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10-	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the afternoon?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey – PM (Parent Pick-Up)

Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle)

Date: ____

Page: 3 of 3

Respondent	Time	How did you get to the Child Care Centre this afternoon?	If you drove this afternoon, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the afternoon?
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Respondent	Time	How did you get to the Child Care Centre this morning?	If you drove this morning, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the morning?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey – <u>AM (Parent Drop-Off)</u>

Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle)

Date: ____

Page: 2 of 3

Respondent	Time	How did you get to the Child Care Centre this morning?	If you drove this morning, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the morning?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey - AM (Parent Drop-Off)

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Page: 3 of 3

Respondent	Time	How did you get to the Child Care Centre this morning?	If you drove this morning, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the morning?
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Clyde 140 C	Street Childca lyde Street, No	are Centre orth Bondi	-01	CLOPOD Affie Engineering		Job No: 2020/661 February 2021
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Respondent	When did you start work today?	How did you arrive to work today?	When do you finish work today?	How will you leave work today?	If you drove, where did you park your car?	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<10min, 10-20min, OR >20min Walk)
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey - AM (Parent Drop-Off)

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6 . 10% **Clyde Street Childcare Centre** Job No: 2020/661 140 Clyde Street, North Bondi February 2021 Parent / Caregiver Travel Mode Survey - AM (Parent Drop-Off) Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle) Date: Page: 3 of 3 If you walked, If you walked, If you drove Roughly, how far away (in How did you did you use the did you use the Roughly, how many times this walking time) from the get to the pedestrian link pedestrian link in a standard week would morning, Child Care Centre do you Respondent Time **Child Care** from Waratah from Murriverie you choose to walk or where did live? Centre this Street? Road? cycle to the Child Care you park (<3min, 3-5min, 5-10min, 10morning? (See picture if (See picture if Centre in the morning? your car? 15min, >15min) unsure) unsure) 21 22 23 24 25 26 27 28 29 30

Clyde Street Childcare Centre 140 Clyde Street, North Bondi



Job No: 2020/661 February 2021

Parent / Caregiver Travel Mode Survey - PM (Parent Pick-Up)

Date:

Day: Monday / Tuesday / Wednesday / Thursday / Friday (Please Circle)

Page: 1 of 3

Respondent	Time	How did you get to the Child Care Centre this afternoon?	If you drove this afternoon, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the afternoon?
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Clyde Street Childcare Centre 140 Clyde Street, North Bondi



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Page: 2 of 3

Respondent	Time	How did you get to the Child Care Centre this afternoon?	If you drove this afternoon, where did you park your car?	If you walked, did you use the pedestrian link from Waratah Street? (See picture if unsure)	If you walked, did you use the pedestrian link from Murriverie Road? (See picture if unsure)	Roughly, how far away (in walking time) from the Child Care Centre do you live? (<3min, 3-5min, 5-10min, 10- 15min, >15min)	Roughly, how many times in a standard week would you choose to walk or cycle to the Child Care Centre in the afternoon?
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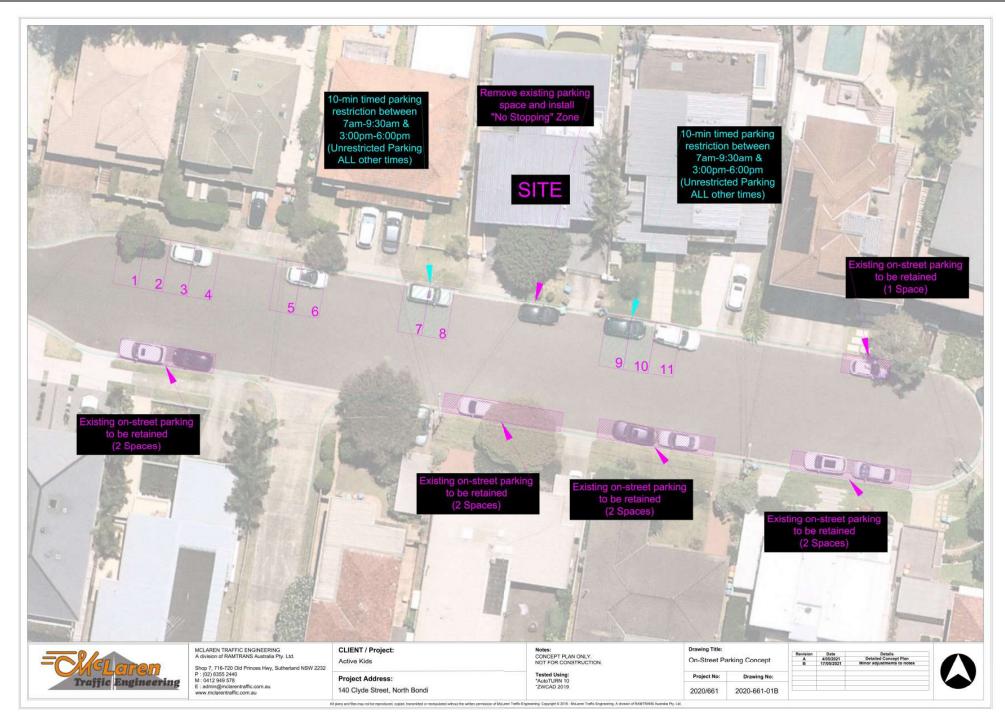
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Respondent	When did you start work today?	How did you arrive to work today?	When do you finish work today?	How will you leave work today?	If you drove, where did you park your car?	Roughly, how far away (ir walking time) from the Child Care Centre do you live? (<10min, 10-20min, OR >20min Walk)
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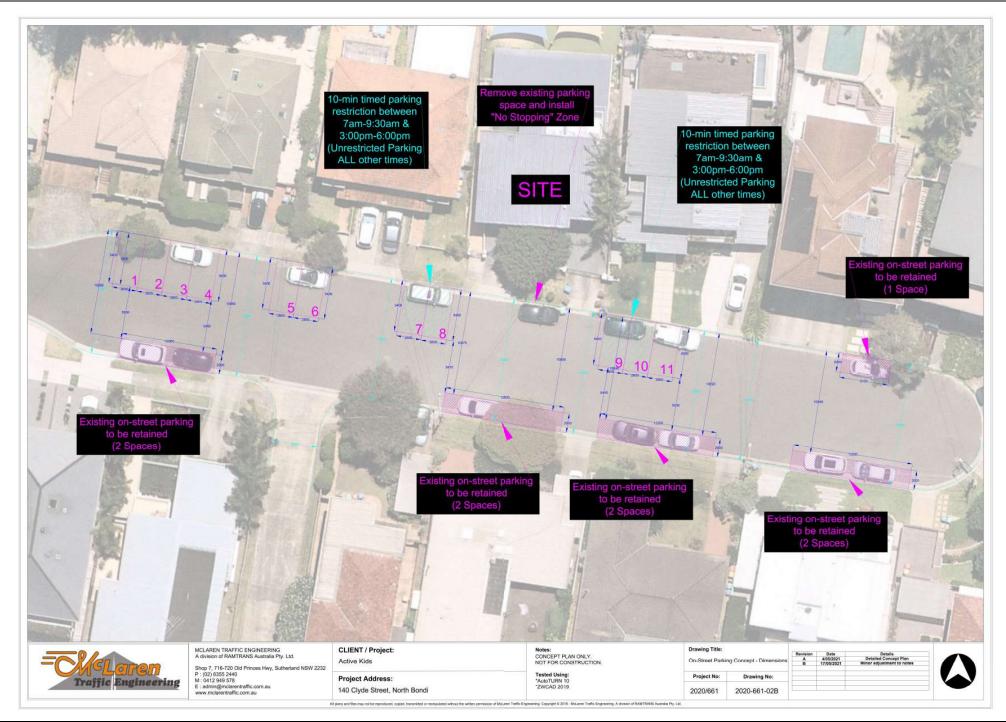


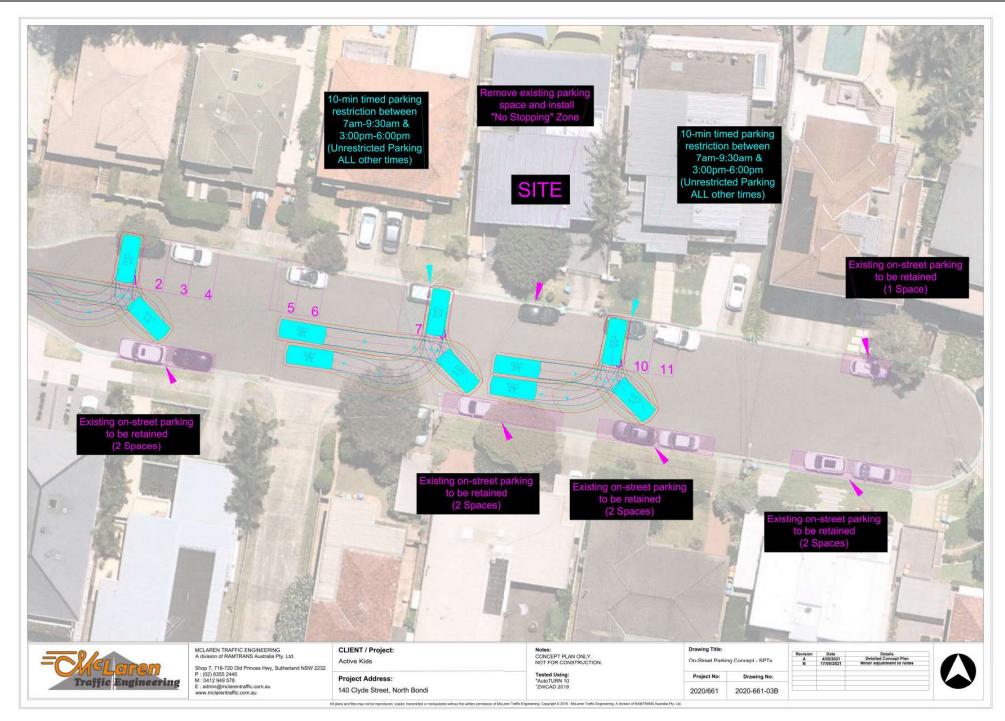
ANNEXURE G: CLYDE STREET "WIDE SECTION"

90-DEGREE PARKING CONCEPT

(3 SHEETS)









ANNEXURE H: CLYDE STREET PASSING ZONE PROPOSAL

(10 SHEETS)



Job No: 2021/0880 March 2022

Clyde Street Passing Zone Proposal

Subject: Clyde Street, North Bondi – "No Parking" Zones

Author: McLaren Traffic Engineering

Date: 11 March 2022

1 Proposal

- Install "No Parking" zones in three (3) location along Clyde Street, North Bondi as follows:
 - a) 13.2m across the driveways of No's. 78 to 82 Clyde Street
 - b) 12.8m across the driveways of No's. 33 to 35 Clyde Street
 - c) 14.5m across the driveways of No's. 43A to 45 Clyde Street.

2 Executive Summary

Following discussions with Council resulting from the concerns of local residents about the existing conditions along Clyde Street, North Bondi (from Hardy Street to eastern end) the introduction of "passing zones" to improve traffic flow along the narrow carriageway is proposed. The proposal is to implement "No Parking" zones across adjacent driveways and road segments, where no parking can currently occur, in order to formalise these spaces as "passing zones".

Council may also require the installation of linemarking within the passing zone segments, to define the limit of "No Parking" with a supplementary dashed continuity line, similar to implemented works in Onslow Street, Rose Bay.

3 Introduction/Background

The issue of two-way passing along Clyde Street has been raised during the assessment of a development application for a increase in scale of sixteen children at the existing child care centre located at 140 Clyde Street, North Bondi. While the proposed child care centre in itself will not significantly increase the rate of passing along Clyde Street, the provision of formalised passing zones will provide an overall net public benefit to all residents, irrespective of the subject development application.

A site inspection was undertaken with the relevant Council Officers, where council identified some three (3) suggested locations for the introduction of "No Parking" zones across multi-width driveways along Clyde Street, as identified in **Section 1** above.

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Clyde Street Passing Zone Proposal Clyde Street, North Bondi



Job No: 2021/0880 March 2022

4 Technical Analysis

Clyde Street is a no through road with a narrow carriageway width of approximately 7m for a large portion of its length. The narrow section has a length of some 310m east from Hardy Street. Parking is in high demand, particular at night time and parking is unrestricted at all times.

An on-site assessment has confirmed that due to the narrow carriageway and high parking on both sides, only one vehicle can travel at a time between parked cars.

It is proposed to install three (3) "No Parking" zones along Clyde Street, one (1) on the northern side and two (2) on the southern side, across multi width driveways as outlined in **Figure 1** and **Table 1** below. It is considered that the proposal will improve traffic flow by providing areas that can be utilised as passing zones. The proposed "No Parking" zones will not result in the loss of any legal on-street parking spaces. Under current NSW Road Rules, "No Parking" restrictions permit a vehicle to stand in the zone for up to two minutes maximum with the driver remaining within 3m of the vehicle at all times.



FIGURE 1: OVERVIEW OF PROPOSED "NO-PARKING" ZONES

	Address	Length	Figure
A	78 to 82 Clyde Street	13.2m	Figure 2
В	33 to 35 Clyde Street	12.8m	Figure 3
С	43A to 45 Clyde Street	14.5m	Figure 4

TABLE 1: PROPOSED "NO PARKING" ZONES - CLYDE STREET

Clyde Street Passing Zone Proposal Clyde Street, North Bondi



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FIGURE 2: 78 TO 82 CLYDE STREET, NORTH BONDI PROPOSED "NO PARKING" ZONE



FIGURE 3: 33 TO 35 CLYDE STREET, NORTH BONDI PROPOSED "NO PARKING" ZONE

Clyde Street Passing Zone Proposal Clyde Street, North Bondi



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FIGURE 4: 43A TO 45 CLYDE STREET, NORTH BONDI PROPOSED "NO PARKING" ZONE

Guidelines Used:

- Transport Administration Act 1988
- RMS's Delegation to Councils; Regulation of Traffic
- RMS's Signage Database
- [NSW] Road Rules 2014

5 Reference to Previous Council Work

Reference is made to Council's pervious work along Onslow Street, Rose Bay where a similar problem was identified by Council. Council proposed and the Local Traffic Committee approved the installation of five (5) "No Parking" zones across multiple driveways along Onslow Street, to provide for passing zones for drivers.

6 Attachments

 Waverly Traffic Committee Agenda Report TC/v.04/18.07 with the subject – Onslow Street, Rose Bay – "No Parking" zones

26 July 2018

REPORT TC/V.04/18.07

Subject:	Onslow Street, Rose Bay - "No Parking" zones	
-		WAVERLEY
TRIM No:	A02/0637-02	COUNCIL
Author:	Sam Samadian, Traffic Engineer	
Director:	Emily Scott, Director, Waverley Renewal	

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs "No Parking" zones on the southern side of Onslow Street, Rose Bay as follows:
 - (a). 17.5 m across the driveways of No's. 5 to 9.
 - (b). 12.5 m across the driveway of No. 13.
 - (c). 9.5 m across the driveways of No's. 29 to 31.
 - (d). 10 m across the driveways of No's. 55 to 57.
 - (e). 13 m across the driveways of No's. 69 to 73.
- 2. Extends the existing "No Parking" zone at the driveway to No.471 Old South Head Road by 8.5m to the west.
- 3. Notifies all residents of Onslow Street of the proposed "No Parking" zones prior the installation.

1. Executive Summary

Following receipt of a petition signed by residents of Onslow Street requesting the introduction of "passing zones" to improve traffic flow in the narrow carriageway, dead end, street, Council officers met the chief petitioner on-site to discuss introducing signposted "No Parking" zones at double width or more driveways to improve traffic flow in the street. Council will need to exercise its delegated function to implement the proposal.

2. Introduction/Background

A petition was received from residents of Onslow Street containing 301 signatures requesting Council give consideration to introducing "passing zones" in Onslow Street to improve vehicle movement in the narrow carriageway, dead end street.

A site inspection was undertaken to identify suitable locations for the introduction of "No Parking" zones across multi width driveways in Onslow Street.

26 July 2018

3. Technical Analysis

Onslow Street is a no through road with a narrow carriageway width of 7m. It has a length of some 420m east from Old South Head Road. Parking is in high demand day and night and mostly unrestricted on both sides.

An on-site assessment has confirmed that due to the narrow carriageway and high parking on both sides, only one vehicle can travel at a time between parked vehicles. It was observed that vehicles often have to be reversed in Onslow Street to find a gap and pull over to allow an oncoming vehicle to pass.

It is proposed to install an additional six (6) "No Parking" zones on the southern side of Onslow Street across multi width driveways as per the table and figures below. It is considered that the proposal will improve traffic flow by providing areas that can be utilised as passing zones. The proposed "No Parking" zones will not result in loss of any legal on-street parking. Under current NSW Road Rules, 'No Parking' restrictions permit a vehicle to stand in the zone for up to two minutes maximum with the driver remaining within 3 m of the vehicle at all times.



Figure 1: Onslow Street, Rose Bay, Aerial image – Existing and Proposed "No Parking" zones

Onslow Street, Rose Bay - Proposed No Parking zones						
Address	Length	Comments	Figure			
471 Old South Head Road	8.5m (west)	Existing zone to be extended by 8.5m	2			
5 to 9 Onslow Street	17.5m	Short section of kerbs	3			
13 Onslow Street	12.5m		4			
29 to 31 Onslow Street	9.5m		5			
43 to 45 Onslow Street	9.5m	Existing	6			
55-57 Onslow Street	10m		7			
69-73 Onslow Street	13m		8			

Table 1: Onslow Street - No Parking restrictions summary table

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Figure 2: Onslow Street frontage of 471 Old South Head Road, Rose Bay Existing and Proposed "No Parking" zones



Figure 3: 5 to 9 Onslow Street, Rose Bay – Proposed 17.5m "No Parking" zone



Figure 4: 13 Onslow Street, Rose Bay - Proposed 12.5m "No Parking" zone

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Figure 5: 29 to 31 Onslow Street, Rose Bay - Proposed 9.5m "No Parking" zone



Figure 6: 43 to 45 Onslow Street, Rose Bay - Existing "No Parking" zone (unchanged)



Figure 7: 55 to 57 Onslow Street, Rose Bay - Proposed 10m "No Parking" zone

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Figure 8: 69 to 73 Onslow Street, Rose Bay – Proposed 13m "No Parking" zone

Guidelines used:

- Transport Administration Act 1988
- RMS's Delegation to Councils; Regulation of Traffic
- RMS's Signs Database
- [NSW] Road Rules 2014

4. Financial Information for Council's Consideration

If changes to signs and/or line marking are approved, Council will undertake the installation of signs and/or line marking from existing budgets.

5. Attachments

Nil.