GREEN TRAVEL PLAN

FOR

KINCOPPAL-ROSE BAY SCHOOL

AT

CORNER NEW SOUTH HEAD ROAD & VAUCLUSE ROAD, VAUCLUSE

Prepared For:

COR UNUM

KINCOPPAL – ROSE BAY

SCHOOL OF THE SACRED HEART

Assessed and Approved by:

McLaren

Traffic Engineering & Road Safety Consultants

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1 Introduction

M^CLaren Traffic Engineering (MTE) was commissioned by *Mahady Management* to provide a Green Travel Plan (GTP) for Kincoppal-Rose Bay School at Corner New South Head Road & Vaucluse Road, Vaucluse. This GTP has been prepared in response to satisfy the condition of consent G25. The relevant conditions are provided below:

> *G25. Prior to the commencement of operation, a Green Travel Plan (GTP), must be submitted to the satisfaction of the Planning Secretary to promote the use of active and sustainable transport modes. The plan must:*
>
> *(a) be prepared by a suitably qualified traffic consultant in consultation with Council and TfNSW;*
>
> *(b) address the requirements of Section 8 of the SEARs;*
>
> *(c) including analysis of staff and student travel survey data and school postcode data and discussion of how this data has informed the mode share targets and actions of the GTP;*
>
> *(d) identify the number of staff and students within reasonable walking / cycling distance;*
>
> *(e) including analysis of staff and student travel survey data and school postcode data and discussion of how this data has informed the mode share targets and actions of the GTP;*
>
> *(f) include strategies that encourage the use of public and active transport and discourage the use of a single occupant car travel to access the site; for staff and students;*
>
> *(g) include the provision of bicycle parking, dedicated end of trip facilities including but not limited to lockers, showers and change rooms and e-bike charging station(s) for staff and students to support an increase in the non-car mode share for travel to and from the site;*
>
> *(h) prepare a Transport Access Guide for staff and students providing information about the range of travel modes, access arrangements and supporting facilities that service the site; and*
>
> *(i) determine a communication strategy for engaging with students, staff and visitors regarding public and active transport use to the site and the proportion of the health and wellbeing benefits of active and non-car travel to the site.*
>
> ***Note:** the Applicant must submit a copy of the final GTP to TfNSW at development.sco@transport.nsw.gov.au for consultation prior to the issue of the first occupation certificate. TfNSW is also happy to meet with the proponent to discuss the above requirements*

The above items to be included are addressed in the sections presented in **Table 1** below.

TABLE 1: DEVELOPMENT CONSENT ITEMS AND SECTION ADDRESSED IN THIS REPORT

Development Consent Item		Addressed Section Number
(a)	*be prepared by a suitably qualified traffic consultant in consultation with Council and TfNSW;*	**Annexure A**
(b)	*address the requirements of Section 8 of the SEARs;*	**Section 4**
(c)	*including analysis of staff and student travel survey data and school postcode data and discussion of how this data has informed the mode share targets and actions of the GTP;*	**Section 4.4**
(d)	*identify the number of staff and students within reasonable walking / cycling distance;*	**Section 4.4**
(e)	*include staged mode share targets for staff and students which reflect a commitment to increase non-carmode share for travel to and from the site;*	**Section 4.4, 4.5 & 4.6**
(f)	*include strategies that encourage the use of public and active transport and discourage the use of a single occupant car travel to access the site; for staff and students;*	**Section 5**
(g)	*include the provision of bicycle parking, dedicated end of trip facilities including but not limited to lockers, showers and change rooms and e-bike charging station(s) for staff and students to support an increase in the non-car mode share for travel to and from the site;*	**Section 3.3**
(h)	*prepare a Transport Access Guide for staff and students providing information about the range of travel modes, access arrangements and supporting facilities that service the site; and*	**Annexure E**
(i)	*determine a communication strategy for engaging with students, staff and visitors regarding public and active transport use to the site and the proportion of the health and wellbeing benefits of active and non-car travel to the site.*	**Section 6**

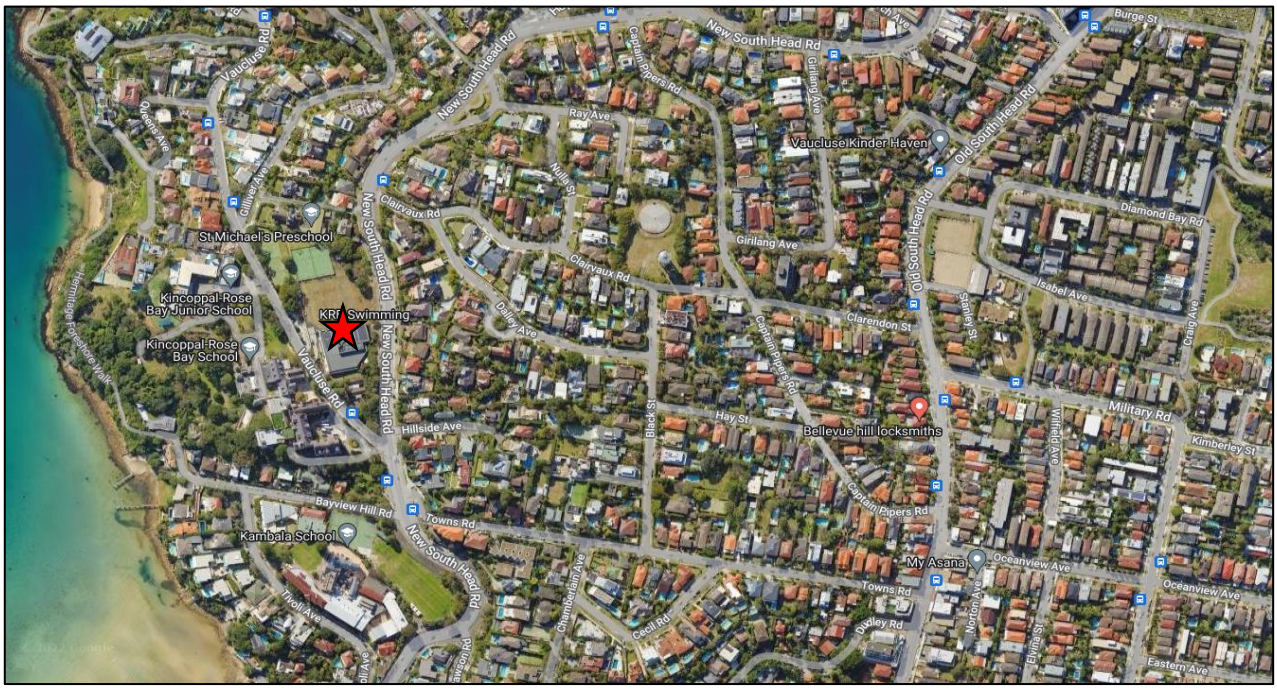
1.1 Development Characteristics and Approvals

Currently, the Kincoppal-Rose Bay School includes classes from pre-school to Year 12. The school has the following characteristics:

- A total of 955 students enrolled in 2020 comprising of:
  - 40 Early Learning Centre students;
  - 372 Kindergarten to Year 6 students;
  - 543 Year 7 to Year 12 students;
- Typically, a total of 150 staff members.

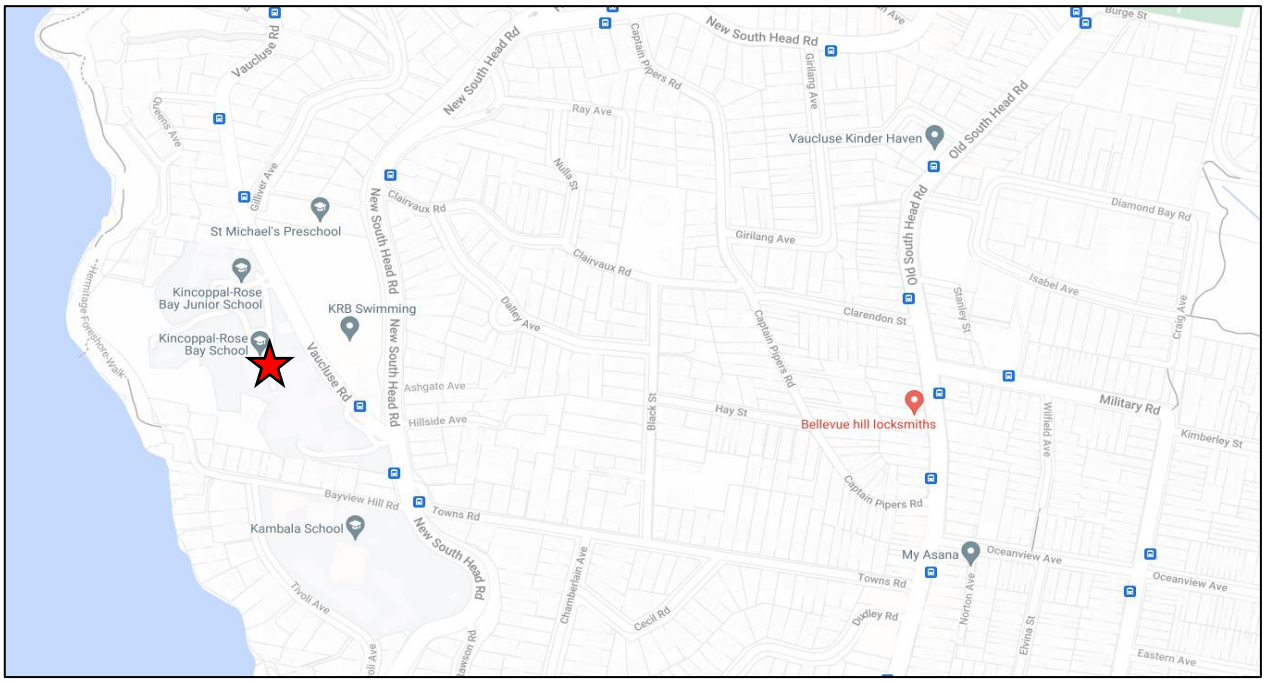
The proposed alterations for the approved development application included increasing the student capacity up by 250 places and staff by 35 (to a total of 1205 staff and 185 staff).

The site is shown on aerial imagery and a street map in **Figure 1** and **Figure 2**, respectively.



Site Location

FIGURE 1: SITE CONTEXT – AERIAL IMAGE



Site Location

FIGURE 2: SITE CONTEXT – MAP

1.2 References

A number of sources have been consulted to inform the preparation of this Green Travel Plan including:

- NSW Premier's Council for Active Living's Workplace Travel Plan Guidelines – Final Report (April 2010);
- NSW State Government Long Term Transport Master Plan;
- Transport for NSW Future Transport Strategy 2056;
- Australian Bureau of Statistics (ABS) Census Data;
- NSW Bureau of Transport Statistics Journey to Work Data;
- Supplementary Traffic Report For Proposed Alterations and Additions to Kincoppal School, Rose Bay by Colston Budd Rogers & Kafes Pty Ltd on 17 June 2021;
- Woollahra Bicycle Strategy 2009 by Woollahra Municipal Council;
- Cycling in Waverly & Woollahra by Woollahra Municipal Council and Waverly Council;
- Public Transport or Private Vehicle: Factors That Impact on Mode Choice, Grace Corpuz (Transport Data Centre, New South Wales Ministry of Transport).

2 Objectives

Alternative modes of transport including walking, cycling and public transport quantifiably promote positive transport and health outcomes. The NSW State Government *Long Term Transport Master Plan* emphasises the importance of alternative transport options in the growth of Greater Metropolitan Sydney. Further to this, the *Future Transport Strategy 2056* also emphasises the importance of encouraging active travel (walking and cycling) and the use of public transport.

Reference is made to the *NSW Premier's Council for Active Living Workplace Travel Plan Guidance – Final Report (April 2010)* provides examples of travel plans appropriate for different size and types of employers outlining that for:

> ***20-250 employees***
>
> *Mainly office-based employees*
>
> *Likely to be beneficial to form alliances with other organizations in the locality also developing a WTP* [Workplace Travel Plan].
>
> *Could focus on key cost saving opportunities such as business travel, and reducing fleet expenses.*

While the employees at Kincoppal-Rose Bay School are not strictly office-based employees this description best matches the nature of how staff work at the school and their associated travel patterns.

This Green Travel Plan has been developed to assist in identifying a range of low-cost initiatives and promotions which will directly benefit staff, students and the school community. This plan will help advise staff and students of sustainable and alternative transport options. The overall objective is to shift travel from private cars to active or public transport options, with the following positive implications:

- Reduced parking demand;
- Reduced traffic congestion and trip duration;
- Positive health outcomes from walking and cycling;
- Improved air quality and reduced per-capita emissions.

3 Existing Alternative Transport Facilities

3.1 Public Transport – Bus Services

Kinncopal-Rose Bay School is serviced by an existing bus stop (ID: 203082) which bus routes 324 (Watsons Bay to Walsh Bay via Old South Head Road), 324X (Vaucluse to City Wynyard, Express Service), 325 (Watsons Bay to Walsh Bay via Vaucluse Road), 386 (Vaucluse to Bondi Junction via New South Head Road & Old South Head Road). **Figure 3** and **Figure 4** below outlines the local transport network surrounding Kinncopal-Rose Bay School.

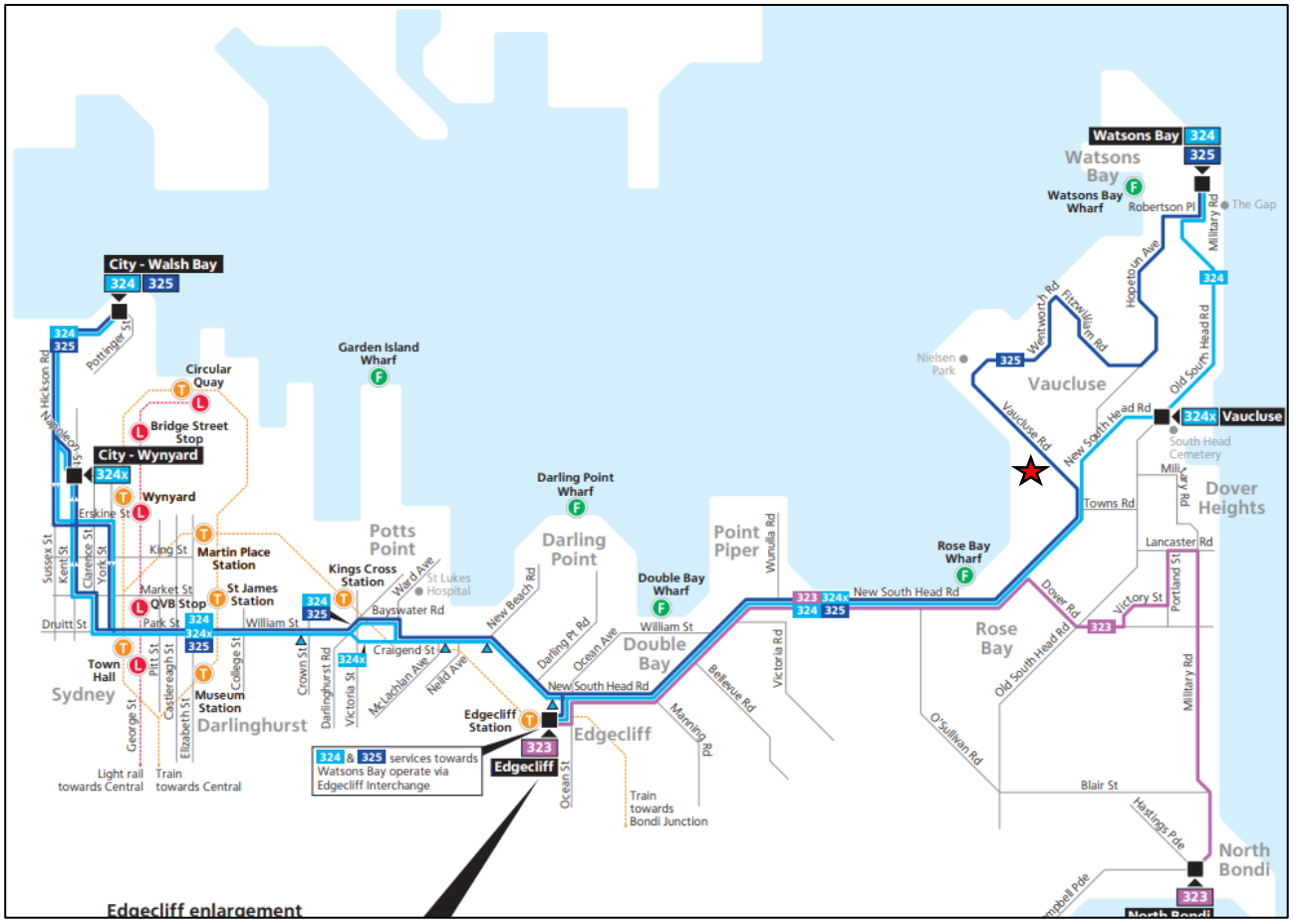


FIGURE 3: ROUTE 324, 324X & 325 MAP

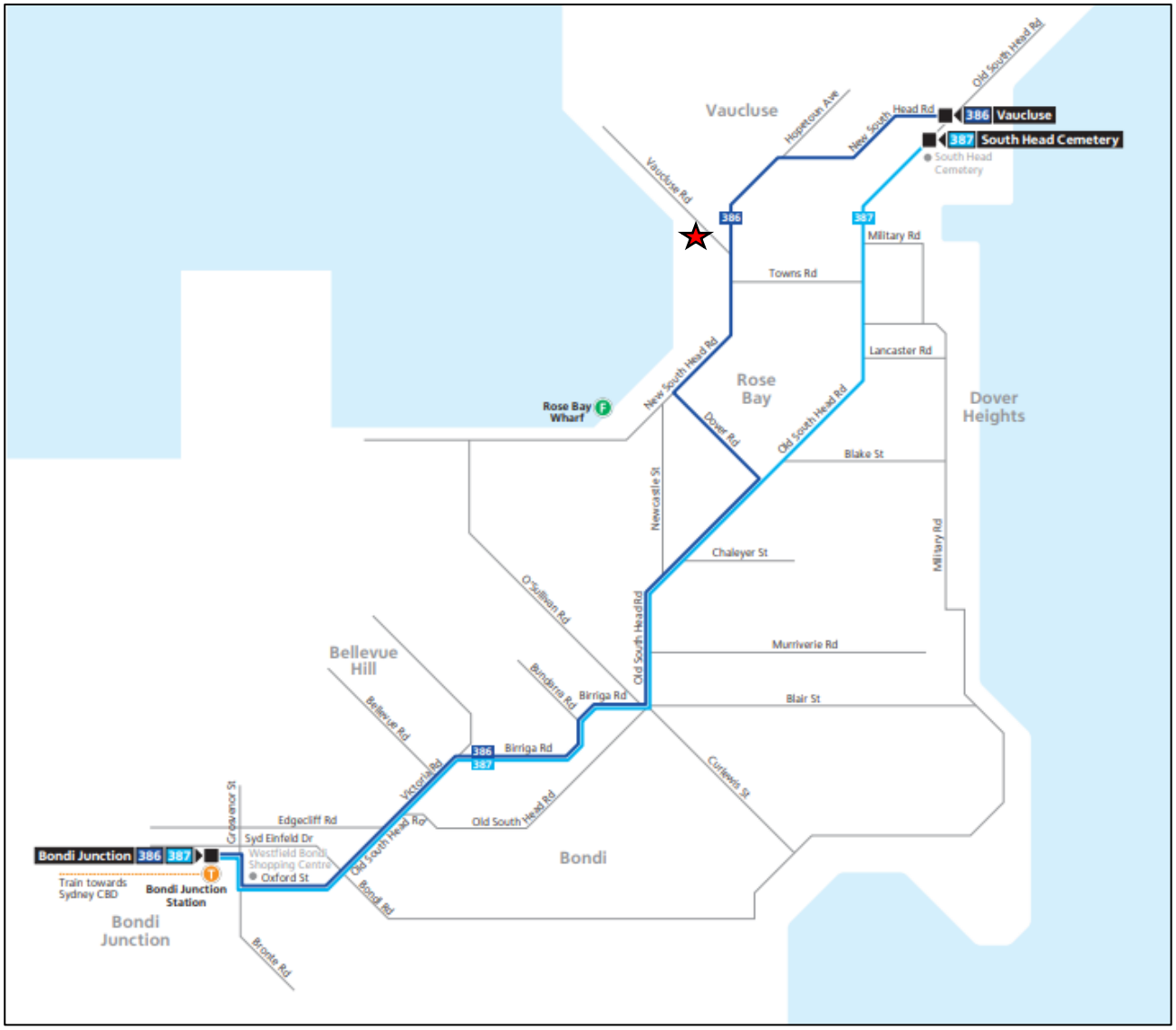


FIGURE 4: ROUTE 386 MAP

Table 2 outlines the frequency of the local bus services provided by *Transdev John Holland Buses*, which pass the site along New South Head Road, Old South Head Road and Vaucluse Road.

TABLE 2: BUS ROUTE FREQUENCY

Route	Destination	Frequency		
		Off-Peak(1)	8 – 9 AM	3 – 4 PM
324	Watsons Bay to Walsh Bay via Old South Head Road	30 min	12 min	15 min
324X	Vaucluse to City Wynyard (Express Service)	-	30 min	-
325	Watsons Bay to Walsh Bay via Vaucluse Road	30 min	30 min	30 min
386	Vaucluse to Bondi Junction via New South Head Road & Old South Head Road	30 min	30 min	20 min

NOTE:

(1) Off-peak period – $11:00_{AM}$ to $1:00_{PM}$.

As shown above, the 324 route provides regular bus services between Kincoppal-Rose Bay School to Dawes Point and Watsons Bay in both directions throughout the day. The 325 and 386 provides two (2) services per peak period, which is generally unattractive to choice riders however is frequent enough for commuters planning ahead. The 324X route is infrequent and only available in the AM period providing a total of two (2) total services.

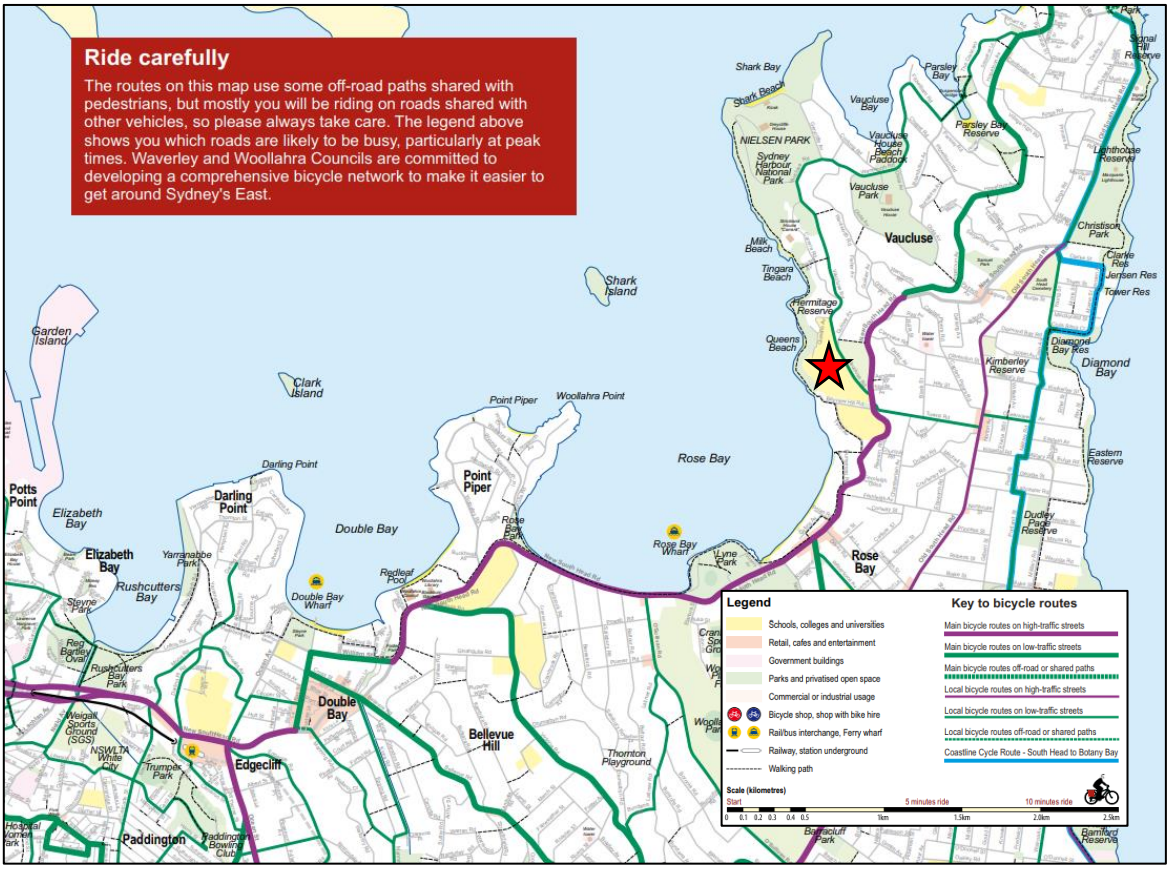
3.2 Public Transport – Train Services

Kincoppal-Rose Bay School is not within convenient walking distance to any train stations, however, the bus routes mentioned in **Section 3.1** provide direct connection to Town Hall Station (324 & 325), Kings Cross Station (324 & 325), Edgecliff Station (324 & 325) and Bondi Junction Station (386).

3.3 Active Transport – Cycling

The subject site has access to cycle paths as presented within *Woollahra Municipal Council's – Cycling in Waverly & Woollahra* map. Marked cycle routes encourage individuals to utilise bicycles as a mode to travel, reducing motor vehicle congestion and overall motor vehicle usage. Cyclists can travel north or south utilising Vaucluse Road and east or west using Towns Road which are marked as *"main bicycle routes on low-traffic streets"*. New South Head Road is a high volume road, hilly and without shoulder area which does not make an ideal bike route during peak hours.

The location of the site relative to the surrounding cycling routes is depicted in **Table 5**, with a copy of the *Cycling in Waverly & Woollahra* map provided in **Annexure B**.



Site Location

FIGURE 5: SITE CONTEXT – CYCLING ROUTES

It should be noted that the school proposes to provide 18 bicycle parking spaces on-site for use by students and staff. Additionally, end of trip facilities are provided for within the Maureen Tudehope Centre (MTC) for those teachers and staff that choose to cycle to the school.

3.4 Active Transport – Walking

Pedestrian walking facilities are abundantly provided within close proximity to the site. Specific details of the walking facilities are provided below:

- **Vaucluse Road:**
  - Pedestrian walkways are provided along both sides of the road;
  - Line-marked pedestrian crossing facility located in front of the site;
  - Signalised pedestrian crossing facility located at the intersection of Vaucluse Road / New South Head Road.
- **New South Head Road:**
  - Pedestrian walkways are provided along both sides of the road;
  - Signalised pedestrian crossing facility located at the intersection of Vaucluse Road / New South Head Road.

There are numerous existing pedestrian walking facilities that have been provided by council within close proximity of the site. Staff and students who live close to the site may utilise these facilities to reduce the number of vehicles driven.

3.5 School Specific Transport

Kincoppal – Rose Bay School provides a separate bus service available to students at the school for a fee as an alternate mode of transport. The bus service covers seven routes which include:

- Malabar / Maroubra / Coogee / Bronte / Bondi – return service
- Eastgardens / Pagewood / Kingsford / Randwick / Tamarama – return service
- Stanmore / Annandale / Rozelle / Balmain / City / Woollahra – return service
- Hunters Hill / Lane Cove / Greenwich – return service
- Willoughby / Northbridge / Cammeray / Paddington – return service
- Earlwood / Marrickville / Paddington / Woollahra / Bondi – return service
- Edgecliff Station / William St / Macquarie St / Circular Quay – 5.15pm Service

Most of the above services operate as a return service meaning they are available to students to be picked up in the morning and dropped-off in the afternoon with the exception of the Edgecliff Station / Circular Quay route which operates only for drop-off in the afternoon Monday to Thursday.

4 Alternative Transport Strategy

4.1 Timeframe

This Green Travel Plan will apply from the issue of the Occupation Certificate for any works performed under this development application.

4.2 Existing Transport Use of School Staff

4.2.1 Staff of Kindergarten to Year 6

A survey of the existing school staff was undertaken, and it was found that 86.7% of school staff drive to school, resulting in only 13.3% utilising alternative modes of transport.

Based on the above, alternative modes of transport for staff are not desirable or have not been advertised to school staff. It is possible that some staff members would change their mode of travel if easy and accessible public transport was available or advertised to staff or car sharing schemes were available.

4.2.2 Staff of Year 7 to Year 12

A survey of the existing school staff was undertaken, and it was found that 76.4% of school staff drive to school, resulting in only 23.6% utilising alternative modes of transport.

Based on the above, some alternate transport modes are used by staff, however additional information should be given to staff members to encourage them to change their modes of travel from private vehicle us to public/active transport use.

4.3 Existing Transport Use of Students

4.3.1 Kindergarten to Year 6

A survey of the students was undertaken to determine their current mode of transport to and from school every day. The results of the travel mode surveys are summarised in **Table 3**.

TABLE 3: STUDENT TRAVEL MODE SURVEY RESULTS (KINDERGARTEN TO YEAR 6)

TRAVEL MODE	Travel to School	Travel from School
Car	256 (75.7%)	248 (74.9%)
KRB Bus	51 (15.1%)	52 (15.7%)
Public Bus	15 (4.4%)	18 (5.5%)
Train and Bus	0 (0%)	3 (0.9%)
Walked	11 (3.3%)	7 (2.1%)
Other	5 (1.5%)	3 (0.9%)

As shown above, a 75.7% of students utilise private transport to school and 24.3% utilise public or alternate transport modes to school.

4.3.2 Year 7 to Year 12

A survey of the students was undertaken to determine their current mode of transport to and from school every day. The results of the travel mode surveys are summarised in **Table 4**.

TABLE 4: STUDENT TRAVEL MODE SURVEY RESULTS (YEAR 7 TO YEAR 12)

TRAVEL MODE	Travel to School	Travel from School
Car (Passenger)	127 (31.0%)	105 (25.1%)
Car (Driver)	8 (2.0%)	7 (1.7%)
KRB Bus	61 (14.9%)	89 (21.3%)
Public Bus	100 (24.4%)	112 (26.8%)
Train and Bus	10 (2.4%)	11 (2.6%)
Walked	88 (21.4%)	82 (19.6%)
Other	16 (3.9%)	12 (2.9%)

As shown above, a 33% of students utilise private transport to school and 67% utilise public or alternate transport modes to school.

4.4 Student Cycling and Walking Suitability

The post codes of students were obtained to determine the walking & cycling suitability of the school (results reproduced in **Annexure C**). The following assumptions have been made to produce this assessment:

- A reasonable cycle time of ten (10) minutes for students (2.5km cycling distance);
- A reasonable walking time of ten (10) minutes for students (800m walking distance);
- As post codes do not convey the specific location of students, a central suburb within the postcode was identified for each post code to approximate the distance to the school.
- The maximum distance considered for this assessment is 5.8km from Kincoppal-Rose Bay School.

A summary of the relevant post codes assessment is shown in **Table 5**.

TABLE 5: STUDENT POST CODE SUMMARY

Post Code	Suburb	Number of Students	Distance (km)	Cycle Time (minutes)	Walk Time (minutes)
2022	Bondi Junction	16	4.4	17.6	52.8
2023	Bellevue Hill	84	3.4	13.6	40.8
2024	Bronte	24	5.6	22.4	67.2
2025	Woollahra	30	5.8	23.2	69.6
2026	Ben Buckler	116	4.5	18	54
2027	Darling Point	26	5	20	60
2028	Double Bay	24	4.1	16.4	49.2
2029	Rose Bay	90	0.95	3.8	11.4
1030	Diamond Bay	194	1.3	5.2	15.6

Figure 6 presents the approximate 2.5km catchment area relative to Kincoppal-Rose Bay School.

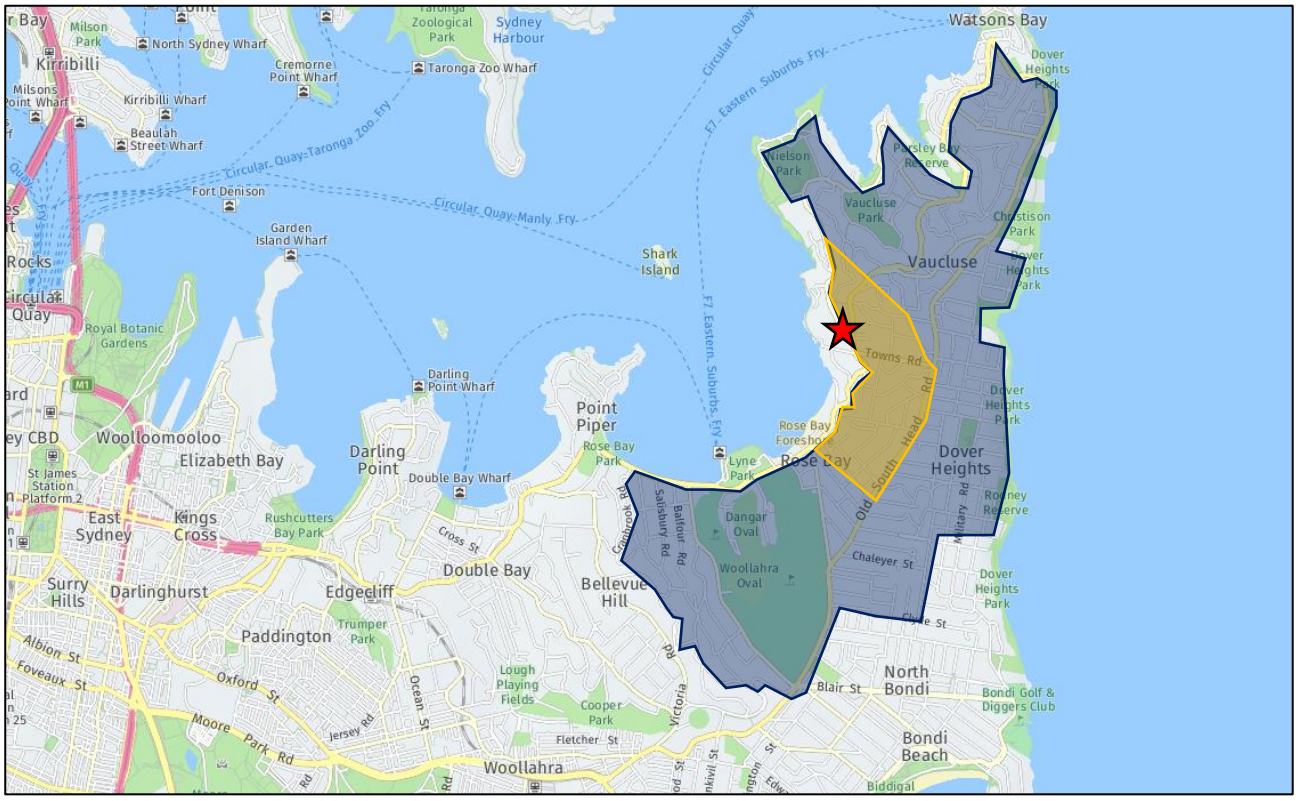


FIGURE 6: INDICATIVE 10-MINUTE CATCHMENT AREA

From **Table 5**, it is evident that 61.2% of students (604 students) are located within acceptable locations to cycle to school. Further, 28.8% of students (284 students within Rose Bay / Diamond Bay post codes) are located within acceptable walking distance to school. From this, it is evident that active transport should be promoted as an alternate mode of transport for students.

4.5 Existing Transport Use in Surrounding Area

To assist in setting the targets and milestones for transport use of staff, the NSW Bureau of Transport Statistics 2016 Journey to Work data has been consulted for the suburb of Vaucluse. The data shows that on average 65.8% of workers in these areas drive to and from work, with the detailed travel mode split summarised in **Table 6** illustrated in **Figure 7**.

TABLE 6: VAUCLUSE EXISITING TRAVEL MODE SPLIT

Mode of Transport	Usage Rate
Vehicle Driver	65.8%
Vehicle Passenger	5.3%
Train	9.2%
Bus	7.8%
Walk Only	2.8%
Bicycle	0.5%
Motorbike / Scooter	1.8%
Truck	0.3%
Ferry	5.5%
Other	1.0%

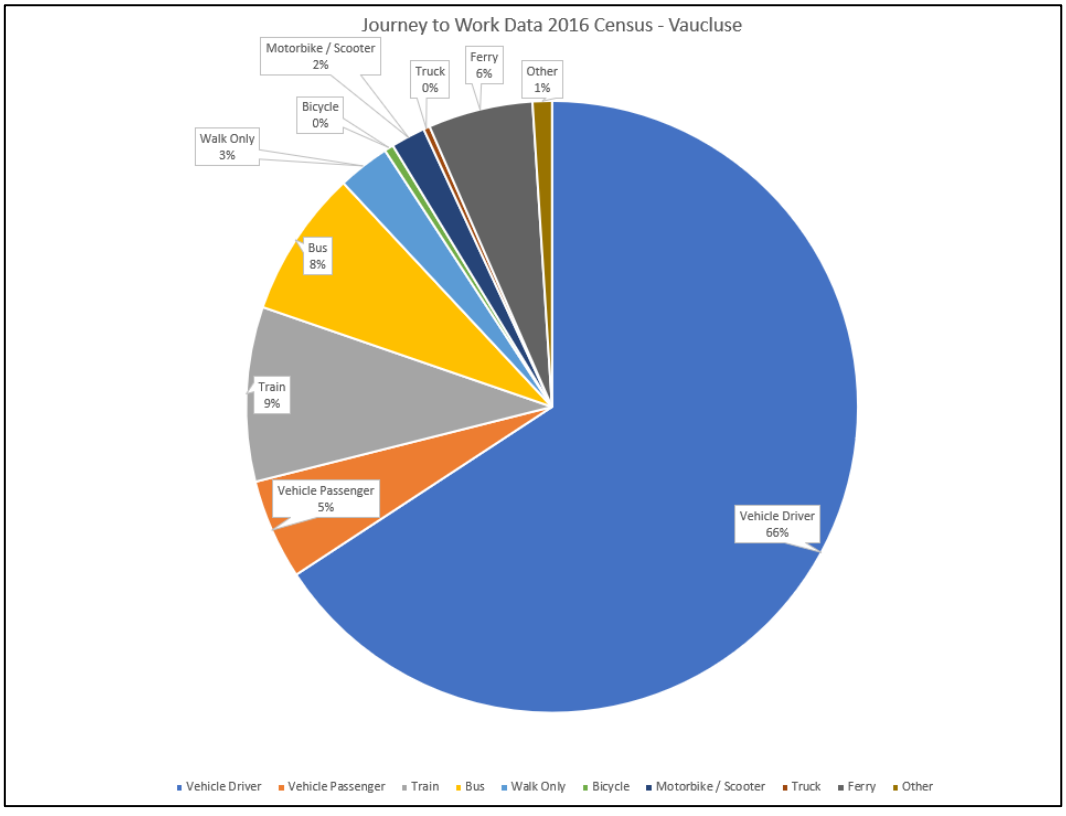


FIGURE 7: JTW WORK DATA FOR VAUCLUSE

In addition to the travel mode split, the distance to work for workers within the Rose Bay – Vaucluse – Watsons Bay Statistical Area was obtained from the Australian Bureau of Statistics 2016 census. The distance that workers typically travel is presented in **Table 7** and **Figure 8**.

TABLE 7: VAUCLUSE WORKER DISTANCE TRAVELLED

Distance Travelled	Proportion of Workers
Over 0 km to less than 2.5 km	20%
2.5 km to less than 10 km	29%
10 km to less than 30 km	40%
30 km to less than 50 km	8%
50 km to less than 250 km	2%
250 km and over	1%

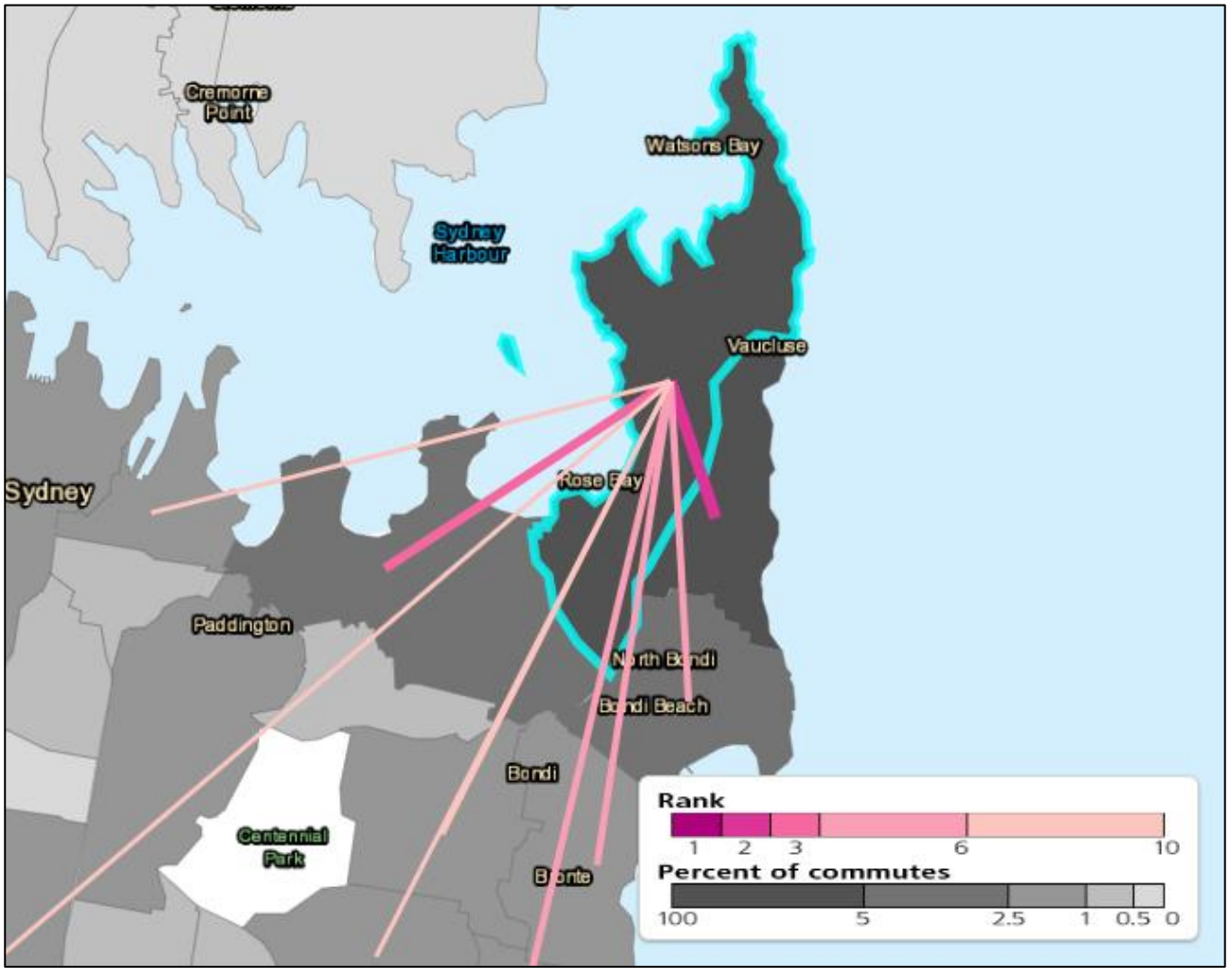


FIGURE 8: VAUCLUSE WORKERS HOME LOCATION

As shown above, 20% of workers travel less than 2.5km to work within the Rose Bay – Vaucluse – Watsons Bay area. Similar to the students, it has been assumed that 2.5km is a reasonable distance for staff to utilise active transport to the school. Based on the proposed

185 staff members this would result in 37 staff members located within a reasonable active transport distance.

4.6 Targets and Milestones

Through the implementation of the actions described in **Section 5**, continual increases in alternative transport use are anticipated for the duration of this Green Travel Plan's effectiveness. It should be noted that there is more potential for staff members to reduce their private vehicle usage. This is due to the already high alternate transport use by the students.

4.6.1 Staff Targeted Transport Mode Split

An achievable target for the travel mode split for staff is to aim to reduce the existing driver percentage by 20% for both the junior and senior school staff over a 10 year period. This would approximately align the school teaching staff transport mode split with the Journey to Work average of the area. An overall target of 10% private vehicle reduction in the first three (3) years and a further 10% reduction in the subsequent seven (7) years is applied for staff. The resulting 1, 3, 5, and 10-year goals for the travel mode split for staff is depicted in **Table 8** and **Table 9**.

TABLE 8: TARGETED TRANSPORT MODE SPLIT – STAFF (K TO YEAR 6)

Mode of Transport	Usage Rate				
	Existing	1yr	3yr	5yr	10yr
Private Car	87%	84%	77%	74%	67%

TABLE 9: TARGETED TRANSPORT MODE SPLIT – STAFF (YEAR 7 TO YEAR 12)

Mode of Transport	Usage Rate				
	Existing	1yr	3yr	5yr	10yr
Private Car	76%	73%	66%	63%	56%

4.6.2 Student Targeted Transport Mode Split – Junior Students

For the junior students (K to Year 6), a similar target of 10% private vehicle reduction in the first three (3) years and a further 10% reduction in the subsequent seven (7) years is applied. With consideration to the number of students that live within an acceptable walking distance focus should be made into targeting walking as a viable mode of transport.

The resulting 1, 3, 5, and 10-year goals for the travel mode split for students is depicted in **Table 10**.

TABLE 10: TARGETED TRANSPORT MODE SPLIT – JUNIOR STUDENTS – TO AND FROM SCHOOL

Mode of Transport	Usage Rate				
	Existing	1yr	3yr	5yr	10yr
TO SCHOOL					
Car	76%	73%	66%	63%	56%
Train(1)	0%	0%	0%	0%	0%
KRB Bus	15%	15%	16%	16%	17%
Public Bus	4%	4%	6%	7%	8%
Walk	3%	5%	8%	10%	13%
Other	2%	2%	2%	2%	2%
Cycling	0%	1%	2%	2%	4%
FROM SCHOOL					
Car	75%	72%	65%	62%	55%
Train(1)	1%	1%	1%	1%	1%
KRB Bus	16%	16%	17%	17%	18%
Public Bus	5%	5%	6%	7%	8%
Walk	2%	4%	7%	9%	13%
Other	1%	1%	1%	1%	1%
Cycling	0%	1%	3%	3%	4%

Note:

(1) The closest train station is approximately 4.6km walking distance from the site. As such, nil changes to the train split have been applied.

The primary aim of the targeted transport mode split is to encourage students to use active modes of transport to and from school with a slight emphasis on walking. The travel mode survey suggests that no students currently cycle to school. It is anticipated that bicycle use can be strongly recommended for students by informing parents of safe bicycle routes and implementing cycling initiatives. Further, other active transport modes such as walking should continuously be encouraged for the health benefits.

4.6.3 Student Targeted Transport Mode Split – Senior Students

For senior students (year 7 to year 12) a target of 1% year on year growth in the use of alternate transport methods for 10 years will be applied to students as the alternate transport usage is already generally high.

The resulting 1, 3, 5, and 10-year goals for the travel mode split for students is depicted in **Table 11**.

TABLE 11: TARGETED TRANSPORT MODE SPLIT – SENIOR STUDENTS – TO AND FROM SCHOOL

Mode of Transport	Usage Rate				
	Existing	1yr	3yr	5yr	10yr
TO SCHOOL					
Car (Passenger)	31%	30%	28%	27%	23%
Car (Driver)	2%	2%	2%	1%	0%
KRB Bus	15%	15%	15%	15%	15%
Public Bus	24%	24%	24%	24%	25%
Train and Bus	2%	2%	2%	2%	2%
Walked	22%	22%	23%	24%	25%
Other	4%	4%	4%	4%	4%
Cycling	0%	1%	2%	3%	6%
FROM SCHOOL					
Car (Passenger)	26%	25%	24%	22%	17%
Car (Driver)	1%	1%	0%	0%	0%
KRB Bus	21%	21%	21%	21%	21%
Public Bus	27%	27%	27%	28%	28%
Train and Bus	2%	2%	2%	2%	2%
Walked	20%	20%	21%	22%	23%
Other	3%	3%	3%	3%	3%
Cycling	0%	1%	2%	4%	6%

A large majority of senior students already use active and public transport as their primary method to go to and from school, therefore, retaining the existing active and public transport mode for students would also be an acceptable outcome and effective use of this Green Travel Plan. In addition to this, the goal of nil (0) student drivers would also be the ideal outcome. Further, the travel mode surveys indicate that cycling is not a preferred mode of transport for senior students. It is anticipated that use of bicycles (including e-bikes) can strongly be encouraged as an alternate active transport mode.

The initial focus of the alternative transport initiatives will be implementing the initiatives described in **Section 5** of this report, which include various programs to encourage walking, cycling, catching public transport and using carpooling to get to and from Kincoppal-Rose Bay School

4.7 Woollahra Bicycle Strategy 2009

Reference is made to the *Woollahra Bicycle Strategy 2009* which states the following outcomes relevant to bicycle use for schools:

> ***4.8.2 Ride to School Strategy***
>
> *The Woollahra Bicycle Strategy will develop specific actions aimed at encouraging more riding to school and lifting the current low level of cycling to the large number of school campuses in the area. The Bicycle Strategy will incorporate working with schools in the area to:*
>
> - *Identify barries to cycling access within a school's catchment area;*
> - *Identify possible key feeder routes to each school and where possible develop a program of initiatives to upgrade these routes to a high standard;*
> - *Identify parking and end of trip issues within schools and provide advice to schools on raising these facilities to a higher standard;*
> - *Support existing State Government sponsored Ride to School campaigns and initiatives, and assist schools to access these programs and their resources; and*
> - *Investigate innovative alternatives to car-based journeys for students coming from other parts of Sydney, such as: Drop and Ride (drop children at a centra park-like area which is well connected to the school via a high-quality separated route); and, Bike Bus (groups of parents in an area take turns at escorting groups of children to school by bike).*

From the above, it is evident that Woollahra Council endorses cycling to school and supports initiatives such as the Ride to School campaign. The travel mode surveys conducted indicate that not many students or staff cycle to and from school. There is a good opportunity to increase this mode of transport by strongly encouraging staff and students through the incentives outlined within **Section 5**.

4.8 Measurement and Reporting

4.8.1 Frequency

Travel mode surveys will be undertaken annually for the lifecycle of the development.

4.8.2 Method

The school executives will conduct surveys in class annually and from time to time when the Green Travel Plan is updated. Further, a copy of the travel survey has been provided within **Annexure D** which is to be filled out by all staff and students for the updated surveys. The surveys will also include a feedback field such that staff can suggest schemes or initiatives for the school to adopt to encourage alternative transport use.

4.8.3 Reporting

Following the completion of surveys, the results will be compiled into a report for review by the Travel Plan Coordinator and School Committee to plan for further initiatives if required.

5 Projects and Programs

The following actions form the basis for the implementation of the Green Travel Plan.

Collectively, these actions have been designed to help achieve the targets and milestones set out in **Section 4**. It should be noted that these actions are potential options that should be investigated and implemented as appropriate.

5.1 Initiatives to Specifically Reduce Private Car Use

The following initiatives are suggested to lower private car usage by providing for facilities or programs with the aim to allow for greater flexibility in the choice of travel mode to and from the school. The strategies that can be implemented with this goal in mind are not limited to the following actions as shown in **Table 12**, but these are the basis for further reduction in private car reliance.

TABLE 12: INITIATIVES TO REDUCE PRIVATE CAR USAGE

Action	Cost	Target Group	Date
Provide large lockers or storage areas for the storing of books and other bulky items	Moderate	Staff and Students	Ongoing
Promote digital learning facilities that reduce the reliance on physical books and other resources that must be transported	Moderate	Staff and Students	From date of implementation
Encourage staff to plan ahead and to transport heavy/bulky items once or twice per week only	Minimal	Staff	From date of implementation
Limit the number of car spaces when more sustainable transport options are available in the future	Minimal	Staff	Ongoing
Charge a fee for car parking which is pledged toward sustainable transport initiatives	Moderate	Staff	Ongoing
Provide pre-loaded opal cards to staff dedicated to public transport use	Moderate	Staff	Ongoing
Provide shuttle bus for students to key areas of residence.	Moderate	Students	Ongoing
Provide shuttle bus for staff to Edgecliff Train Station.	Moderate	Staff	Ongoing

5.2 Public Transport Initiatives

The following actions are focused on encouraging staff and students to partake in public transport when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 13**, but these are the basis for further development of public transport options.

TABLE 13: PUBLIC TRANSPORT INITIATIVES

Action	Cost	Target Group	Date
Develop a map showing public transport routes to Kincoppal-Rose Bay School	Minimal	Staff and Students	Ongoing
Put up a notice board with leaflets and maps showing the main public transport routes to and from Kincoppal-Rose Bay School	Minimal	Staff and Students	From date of implementation
Prepare a Transport Access Guide (TAG) for the site	Minimal	Staff and Students	From date of implementation
Create student groups based on home address, pairing groups of students to assist in the use of public transport	Minimal	Students	Ongoing
Make access to OPAL cards for students more accessible (i.e. provide cards to students upon enrolment)	Minimal	Students	Ongoing
Offer Staff subsidies to offset public transport costs	Minimal	Staff	Ongoing
Incorporate a role for a school sustainable travel champion that focuses on modelling the desired behaviours and positive communication around active and public transport	Nil	Staff and Students	Ongoing
Provide shuttle bus for staff to Edgecliff Train Station.	Moderate	Staff	Ongoing

5.3 Walking and Cycling Initiatives

5.3.1 Walking

The following actions are focused on encouraging staff and students to partake in walking when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 14**, but these are the basis for further development of active transport options.

TABLE 14: WALKING INITIATIVES

Action	Cost	Target Group	Date
Identify students and staff living near work that may be interested in walking to work	Nil	Staff and Students	Ongoing
Produce a map showing safe walking routes to and from the site with times, not distances, to local facilities, such as shops and public transport	Minimal	Staff and Students	From date of implementation
Provide showers, lockers and changing room facilities	As per construction	Staff	From date of implementation
Implement incentive schemes to encourage employees to walk to work	Minimal	Staff	From date of implementation
Provide subsidised panniers or backpacks for staff committed to active travel	Minimal	Staff	Ongoing
Take part in '*National Walk to Work Day*'	Nil	Staff and Students	Annually
Have some '*TravelSmart Get to Work*' days encouraging staff to commute by alternative transport modes	Nil	Staff and Students	Annually
Encourage staff and students to walk as a method of exercise	Nil	Staff and Students	Ongoing
Promoting to parents the potential of active travel to school as an opportunity to stay active themselves	Nil	Students	Ongoing
Arrange for older students to adjust their route to walk past the houses of younger students when walking to and from school	Minimal	Students	Ongoing
Promote active travel as a means to support staff and students health and wellbeing	Nil	Staff and Students	Ongoing
Hold competitions and offer prizes for staff and students that walk to School e.g. STEPtember	Minimal	Staff and Students	Ongoing

5.3.2 Cycling

The following actions are focused on encouraging staff and students to partake in cycling when travelling to and from the site. The strategies to be implemented are not limited to the actions as shown in **Table 15**, but these are the basis for further development of active transport options.

TABLE 15: CYCLING INITIATIVES

Action	Cost	Target Group	Date
Organise an after-work ride. It does not have to be long or strenuous and could end up somewhere for dinner. This idea is to encourage people who might be reluctant to cycle to give it a go	Nil	Staff	Quarterly
Provide sufficient bicycle parking to meet peak needs	As per construction	Staff and Students	From date of implementation
Have good, secure parking in an easily accessible location	As per construction	Staff and Students	From date of implementation
Provide bicycle parking for visitors	As per construction	Site Wide	From date of implementation
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	As per construction	Staff and Students	From date of implementation
Provide showers, changing rooms and lockers	As per construction	Staff	From date of implementation
Provide e-bike charging stations	As per construction	Staff and Students	From date of implementation
Wayfinding at the school for End of Trip facilities locating where showers, lockers and change rooms are.	As per construction	Staff and Students	From date of implementation
Provide cycling incentives for students such as snack vouchers for the canteen (if the student cycled to school)	Minimal	Students	From date of implementation
Encourage Staff to set an example for students through demonstration of alternate transport use	Nil	Staff and Students	From date of implementation
Circulate maps of cycle paths in the vicinity	Nil	Staff and Students	Ongoing
Participate in annual events such as ‘Ride to Work Day’	Nil	Staff	Annually
Arrange information sessions outlining cycling safety and health benefits	Minimal	Staff and Students	Annually
Hold weekly free breakfasts for staff and students who walk or cycle to and from school	Minimal	Students & Staff	From date of implementation
Hold yearly cycling safety sessions, promoting how to be a safe cyclist on the roads	Minimal	Students	Annually
Hold competitions and offer prizes for staff and students that walk or ride to school	Minimal	Staff and Students	Ongoing

Provide salary sacrifice options for purchase of bikes or other micro-mobility options	Minimal	Staff	Ongoing
Allocate time in staff meetings to share tips and support for staff wanting to start cycling	Nil	Staff	Ongoing
Incorporate cycling education initiatives within the physical education curriculum.	Nil	Students	Ongoing

5.4 Sustainable Transport Initiatives

5.4.1 Carpooling

The following actions are focused on encouraging staff and students to partake in carpooling and limiting the number of cars used to travel when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 16**, but these are the basis for further development of alternative transport.

TABLE 16: CARPOOLING INITIATIVES

Action	Cost	Target Group	Date
Set up carpooling databases for staff and students	Nil	Staff and Students	From date of implementation
Promote carpooling at quarterly staff meetings to encourage carpooling amongst staff members with similar travel routes	Nil	Staff	Quarterly
Encourage use of carpooling apps and/or subsidise costs of carpooling trips	Nil	Staff and Students	From date of implementation
Subsidise the cost of fuel for carpooling staff	Minimal	Staff	From date of implementation

5.4.2 Car Parking

The following actions are focused on encouraging staff to partake in alternative options when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 17**, but these are the basis for further development of alternative transport.

TABLE 17: CAR PARKING INITIATIVES

Action	Cost	Target Group	Date
Identify priority users of car park e.g. people with disabilities, carpoolers	Nil	Staff	From date of occupation
Actively discourage senior students from driving to and from school through implementation of meetings and newsletters, with an emphasis and promote alternative transport modes such as the train or bus	Nil	Students	Ongoing

5.5 Use of Incentives

Many of the alternative transport initiatives described above require the willing participation of employees, students and parents and would not otherwise be effective. The incentivisation of alternative transport options could increase the number of employees, students and parents using alternative transport options.

The direct advertisement for alternative transport use is suggested as part of increasing alternative transport utilisation. Some incentivisation strategies are outlined below.

- Provide a yearly seminar of the benefits of utilising public transport including reduced greenhouse gas emissions and health benefits;
- Establish student-based competitions focused on number of days students walk or cycle to school per term.

The above incentivisation strategies could be implemented to boost uptake of alternative travel modes if annual targets are not met.

In addition, a review of the NSW Household Travel Survey by Grace Corpuz identified several factors that affected the use of alternative travel options, identifying the following factors as most influential on alternative transport use (in order of importance):

- Parking capacity and arrangements (destination factor);
- Where a vehicle is not available or accessible (origin factor);
- Where it is cheaper (origin & destination factor);
- Travel time (origin & destination factor);
- Convenience (origin & destination factor);
- Accessibility (origin & destination factor).

Future development of this Green Travel Plan should take into consideration the factors listed above.

6 Implementation Strategy

6.1 Management and Authority

The distribution of and implementation of the measures detailed in this Green Travel Plan is the responsibility of the management bodies of Kincoppal-Rose Bay School. It is the responsibility of the school's management to include alternative transport methods and initiatives in the school website and the school newsletter as well as their regular communications to school staff.

Accordingly, authority is provided to the school's management to implement measures, review the plan and undertake further relevant and appropriate actions.

6.1.1 Travel Plan Coordinator

A travel plan coordinator and supporting team shall be created by the school in order to maintain, review and introduce initiatives within the school. The Travel Plan Coordinator shall ensure the school is meeting the expected travel mode targets and adjust/introduce any initiatives if any shortcomings are developing.

6.2 Distribution

Kincoppal-Rose Bay School management will be responsible to inform staff and parents about any initiatives that they choose to implement via the school website, newsletter and any message boards accessible to members of the school.

6.3 Proposed Incentives

The proposed incentives to be adopted by the school and relevant timeframes for completion is presented in **Table 18**.

TABLE 18: PROPOSED INCENTIVES

Inputs	Activities			Outputs	Impacts	Outcomes
What resources are required?	What	Who	When	What needs to be created?	Performance indicators	What will be achieved?
• Shuttle Bus and Driver	• Provision of Shuttle bus for students and staff and review of bus location and frequency	• Travel Plan Coordinator	• Currently operational	• Produce timetable and review of timetable to suit desired locations for students and staff	• Decrease reliance on private vehicles • 100% staff engaged with Travel Plan • Increase uptake of active transport for staff and students	• Reduce the number of vehicles arriving at the site during peak periods
• Funds for bicycle racks	• Provision of 18 bicycle racks for students and staff	• Travel Plan Coordinator	• Prior to site operation	• Bicycle rack installation		• Improve health and wellbeing of staff and students
• Showers and Change Rooms	• Allow access to the showers and change rooms of the MTC building for staff and students that choose to cycle to school.	• Travel Plan Coordinator and Facility Manager	• Prior to site operation	• Access opportunities for staff and students		• Reduce the number of vehicles arriving at the site during peak periods
• Funds for Opal Cards	• Pre-loaded opal cards	• School Admin and Principal	• Within 6-months	• Public transport fare subsidies		• Reduce the number of vehicles arriving at the site during peak periods
• Funds for equipment	• School subsidised panniers or backpacks for staff committed to active travel	• School Admin and Principal	• Within 6-months	• Equipment sourcing and subsidies		• Improve health and wellbeing of staff

• Staff Resources	• Time in staff meetings to share tips and support for staff wanting to start walking to and from school.	• Travel Plan Coordinator	• Within 1-month and ongoing	• Communication materials		• Education for all staff about different travel options to the school.
• Funds for signage	• Wayfinding at the school for End of Trip facilities locating where showers, lockers and change rooms are.	• School Admin and Principal	• Within 12-months	• Signage		• All staff and students aware of travel options.
• Travel Plan Coordinator Organisation	• Hold competitions and offer prizes for staff and students that walk to School e.g. STEPtember	• Travel Plan Coordinator	• Within 3-months and ongoing	• Communication materials • Ride/Walk to Work events.		• Improve health and wellbeing of staff and students • Build relationships among local community
• Travel Plan Coordinator Organisation	• Promoting to parents the potential of active travel to school as an opportunity to stay active themselves	• Travel Plan Coordinator	• Within 3-months and ongoing	• Communication materials		• Improve health and wellbeing of students and parents
• Travel Plan Coordinator Organisation	• Promote active travel as a means to support staff and students health and wellbeing	• Travel Plan Coordinator	• Within 1-month and ongoing	• Communication materials		• Improve health and wellbeing of staff and students
…	…	…	…	…	…	…

7 Travel Access Guide

A Travel Access Guide (TAG) outlining relevant public transport maps and timetables is provided within **Annexure E**. More recent updates can be accessed via the Trip Planner (transport.info).

ANNEXURE A: CURRICULUM VITAE

(2 SHEETS)

Craig McLaren (Director)

RPEQ 19457

Craig is an acknowledged traffic consultant since the company inception in 1995. The company's primary function has been to serve both the public and private sectors focusing on traffic impact assessments, transport planning, special event transport planning, local area traffic management, road safety and expert evidence at Land and Environment Court, Supreme Court and the Commission of Inquiry.

Qualifications

Bachelor of Civil Engineering, UNSW, 1985

Graduate Diploma in Traffic Engineering, University of New South Wales, 1991

Accredited Level 3 Road Safety Auditor, 1998

Risk Management Workshop, September 2014

Professional Engineers Australia. RPEng 2017

Registered Professional Engineer Queensland 2017 RPEQ 19457

RMS Accredited Traffic Management Plan Designer [2018]

Affiliations:

Member, Australian Institute of Traffic Planning and Management - AITPM

Member, Institute of Transportation Engineers USA (Australian Branch) – ITE

Papers at Conferences

"Safe & Liveable Communities, Can You Have Both?" Georgia Institute of Transportation Engineers, St Simons Island, Georgia USA July 1999.

Experience:

McLAREN TRAFFIC ENGINEERING
1995 to date:
Director and experienced traffic engineer responsible for the conduct of all facets of traffic impact assessment ranging from report preparation, design advice and giving evidence at the Land and Environment Court.

SINCLAIR KNIGHT MERZ
1994 to 1995:
Executive Traffic Engineer. Responsible for the conduct of all facets of traffic impact assessment ranging from report preparation, design advice and giving evidence at the Land and Environment Court.

TRANSPORTATION PLANNING WORKSHOP
1989 to 1994:
Senior Associate. Responsible for the conduct of a vast number of traffic impact assessment report and gained invaluable experience in giving expert evidence before the Land and Environment Court.

ROADS AND TRAFFIC AUTHORITY, NSW
1988 to 1989:
Technical Secretary to the Regional Traffic Committee, Traffic Engineer, Traffic Engineering Section, involved in traffic/transport research, policy development and assisting councils in the application of the Authority's guidelines.

OVE ARUP TRANSPORTATION PLANNING
1985 to 1988:
Traffic Engineer. Involved in the preparation of traffic impact reports for a wide range of projects.

GUTTERIDGE HASKINS & DAVEY
1980 to 1982:
Trainee Civil Engineer. Involved in assisting with road and subdivision design and field surveying.

Daniel Walker (Traffic Engineer)

Experienced traffic Engineer for the preparation and review of traffic and parking impact assessments for a wide range of land uses and scales. Skilled in traffic modelling and analysis, provision of detailed design advice for small and large scale developments.

Qualifications

Bachelor of Engineering (Honours) (Scholar), Class I, Civil Engineering, University of Wollongong, 2018

Accredited Level 1 Road Safety Auditor, 2020

Experience:

McLAREN TRAFFIC ENGINEERING

2016 to date:

- Preparation & Review of Traffic and Parking Impact Assessments
- Construction Traffic Management Plans
- Concept Road and Parking Designs
- SIDRA Traffic Modelling
- Transport and Traffic Planning and Management
- Detailed Design Advice for a variety of Land Uses
- Invarian Rapid Plan

ANNEXURE B: CYCLING IN WAVRELY AND WOOLLAHRA

(2 SHEETS)

DRAFT

cycling

in **WAVERLEY** & **WOOLLAHRA**

Cycling in Waverley & Woollahra

This is one of the most beautiful areas of Sydney with breathtaking harbour and ocean views and some of the best beaches in the world. It is definitely an area worth exploring and what better way to do this than on a bicycle?

Here are five rides, graded for varying levels of experience and fitness, to get you started. Where possible, the rides numbered 1 to 4 use quieter local streets, shared paths and bike lanes. Ride 5 has been designed for road bike riders and this route follows major roads with a good riding surface but with traffic at peak times.

The recommended travel direction for each ride is based on a number of factors: morning peak traffic flows; one-way streets; hill gradient; and ease of turning at intersections. These rides are not recommended for travel in the reverse direction.

The best time of day to do all rides is early morning or weekends when traffic volumes are lowest and the sun's rays are less harsh. We recommend you avoid the commuter peak times. Bondi Junction and Bondi Beach can experience high levels of motor vehicle traffic on weekends particularly during the warmer months.

For more detailed descriptions of the rides go to Waverley and Woollahra Councils' websites:

www.waverley.nsw.gov.au

www.woollahra.nsw.gov.au

THE RIDES

1	Bondi Beach and Rose Bay	Easy	Recreational/ family	11 km
2	Paddington to Darling Point	Easy	Recreational/ family	7 km
3	Centennial Park to Bronte	Easy	Recreational/ family	11 km
4	A grand tour of Sydney's East	Moderate	Recreational/ fitness	32 km
5	Sydney Olympics Road Circuit	Moderate/ Hard	Fitness/sport riders	17 km

CYCLING RULES AND RIGHTS

It is compulsory to:

- wear an approved helmet, worn correctly
- have a working bell or horn
- use front and rear lights that are visible from 200m when riding at night.

A cyclist also has the right to:

- ride two abreast, no more than 1.5m apart
- travel to the front of a line of traffic on the left-hand side of the stopped vehicles
- travel in Bus Lanes and Transit Lanes
- cycle on the footpath if the cyclist is less than 12 years old and the adult is riding in a supervisory capacity.

WANT MORE RIDING OR TRAINING INFORMATION?

Contact your local bicycle user group (BUG), riding groups or a sports/racing club:

BIKEEast www.bikeeast.org.au

Bicycle NSW (02) 9218 5400
www.bicyclensw.org.au

Sydney Cycling Club www.sydneycyclingclub.org.au

Cycling NSW (02) 9738 5850
www.nsw.cycling.org.au

This map is a joint project of Waverley and Woollahra Councils.
For further enquiries contact us at:
www.waverley.nsw.gov.au
www.woollahra.nsw.gov.au

RIDE 1 BONDI BEACH AND ROSE BAY

11km ***Easy***

This ride visits famous Bondi Beach, traversing the relatively flat land through to Rose Bay on Sydney Harbour, and then back to Bondi Junction via Bellevue Hill. The ride starts and finishes in the Oxford Street Mall not far from Bondi Junction railway station.

At Bondi Beach you can take a break and enjoy the excellent cafés or go for a swim, if the weather and surf conditions are good. Plumer Road is also an ideal spot to take a break. Try one of the patisseries, cafés, confectionery or ice cream shops. The return journey takes you past some of the most expensive real estate in the country and fabulous views of Manly, Sydney Harbour and east to the Pacific and Bondi Beach.

LEGEND

Public toilets

RIDE 2 PADDINGTON TO DARLING POINT

7km ***Easy***

This ride explores Paddington and the harbourside residential areas of Edgecliff and Darling Point. Starting and finishing at Oxford Street, opposite the Paddington Army Barracks, the ride takes you along Paddington Street, one of the most magnificent streets in the East. Lined with plane trees and small leaf figs, it is an excellent example of a 19th Century Victorian terrace neighbourhood lovingly restored by its most recent residents.

The intersection of Paddington Street and Jersey Road is the highest point on the route. From here you coast down Thorne Street, lined with renovated workers' cottages. The route then winds through Darling Point, past magnificent mansions and highrise apartments, to Rushcutters Bay Marina, boasting views to the Harbour Bridge and Opera House. The return to Bondi Junction is a beautiful but challenging and steady uphill ride via The Five Ways to Oxford Street.

RIDE 3 CENTENNIAL PARK TO BRONTE

11km ***Easy***

This tour links the green expanse of Centennial Park and Queens Park to the blue Pacific at Bronte. Start on Grand Drive at the Park Kiosk – always a good place for a coffee or a sit down lunch – then head east to Robinson Drive, exiting the Park through the York Road gates.

The ride takes you past historic Bronte House to the café strip at Bronte Beach. Bronte Park is a favourite family picnic spot during the summer months. Take a break in the shade or enjoy a cool dip before taking in the ocean views around Bronte headland via the old tram cutting. The return journey includes a final lap of the 4km Grand Drive circuit.

RIDE 4 A GRAND TOUR OF SYDNEY'S EAST

32km ***Moderate***

This circuit takes in all the major sights of Sydney's East. This scenic ride provides magnificent views of Sydney Harbour, its beaches and suburbs at almost every turn (and hill). The ride is scattered with excellent cafés and restaurants.

The grand tour begins and ends at the Oxford Street Mall in Bondi Junction. After an initial ride through Centennial Park, the route passes Victoria Barracks then descends to the harbour, taking in Rushcutters Bay, Darling Point, Point Piper and the seaplanes moored at Rose Bay. This small wharf was Sydney's first international airport in the days when large seaplanes flew from Sydney to Europe and beyond.

After climbing Heartbreak Hill – well known to partcipants in the popular City to Surf run – the ride continues to the delightful beach at Nielsen Park and the timber-decked suspension bridge over Parsley Bay. Both are excellent spots for a picnic. Then continue on to Watsons Bay ferry wharf, with the famous Doyle's restaurant, and then to the one and only Bondi Beach. You could stop at Bondi Beach for a swim or coffee and a bite to eat at one of the many cafés, bars and restaurants, before the final ascent to Bondi Junction.

RIDE 5 2000 SYDNEY OLYMPIC ROAD CIRCUIT

17km ***Moderate/Hard***

One of the most exciting events in the Eastern Suburbs was the 2000 Olympic road race. An elite group of international riders took on the route between Moore Park and Bronte Beach (men completed fourteen circuits, women seven) cheered on by thousands of Sydneysiders and visitors.

It is still possible to ride almost all of this route in the same direction as it was ridden in 2000. The route mapped here is slightly shorter than the original because some one-way streets were reversed for the race. This route uses mostly main roads and is suitable for experienced sporting/fitness riders.

Recommended coffee/rest stops are at Bronte Beach, Bronte Road shops, Waverley, Centennial Park Kiosk and, on weekends, the coffee cart near the duck ponds off Parkes Drive in the centre of Centennial Park. The route starts and finishes outside the entrance to Aussie Stadium in Driver Avenue, Moore Park. Remnants of the timing strip can still be seen on the asphalt.

Cycling in Waverley & Woollahra

DRAFT

Legend

- Schools, colleges and universities
- Retail, cafes and entertainment
- Government buildings
- Parks and privatised open space
- Commercial or industrial usage
- Bicycle shop, shop with bike hire
- Rail/bus interchange, Ferry wharf
- Railway, station underground
- Walking path

Key to bicycle routes

- Main bicycle routes on high-traffic streets
- Main bicycle routes on low-traffic streets
- Main bicycle routes off-road or shared paths
- Local bicycle routes on high-traffic streets
- Local bicycle routes on low-traffic streets
- Local bicycle routes off-road or shared paths
- Coastline Cycle Route - South Head to Botany Bay

Scale (kilometres)

Start — 5 minutes ride — 10 minutes ride

0 0.1 0.2 0.3 0.4 0.5 1km 1.5km 2.0km 2.5km

Getting the most out of this map

The bicycle routes on this map offer comfortable and direct ways of getting around Sydney's East by bicycle using existing roads and paths. Some roads have bicycle lanes while others don't. Roads have to be shared with motor vehicles and paths with walkers. Busy roads are shown in a different colour. Road conditions vary according to time of day and day of week. Some roads may only be busy in peak hours and in one direction so pick your route to suit conditions.

Though the area is hilly, the routes can be easily managed on most modern bikes with gears. The most heavily trafficked roads usually follow ridgelines and the easiest grades, so short steep sections are often necessary to avoid the traffic.

Your bicycle is the ideal short distance vehicle. On the flat you can easily ride 2.5 kilometres in 10 minutes - add more time for up hills. Of course you will get there even quicker if your route is mostly downhill. Bondi Junction to the City is less than 5km. It's almost all downhill, so, depending on your route, you can usually ride there in under half an hour door-to-door.

Ride carefully

The routes on this map use some off-road paths shared with pedestrians, but mostly you will be riding on roads shared with other vehicles, so please always take care. The legend above shows you which roads are likely to be busy, particularly at peak times. Waverley and Woollahra Councils are committed to developing a comprehensive bicycle network to make it easier to get around Sydney's East.

ANNEXURE C: POST CODE RESULTS
(3 SHEETS)

CountryCo	postcode	Number	Total Bus by Postcode
	2000	16	3
	2009	2	0
	2010	3	0
	2011	6	1
	2015	6	1
	2016	2	0
	2017	6	4
	2018	4	2
	2021	25	11
	2022	16	2
	2023	84	5
	2024	24	6
	2025	30	4
	2026	116	29
	2027	26	3
	2028	24	0
	2029	90	3
	2030	194	3
	2031	40	9
	2032	8	6
	2033	13	8
	2034	27	16
	2035	9	4
	2036	7	5
	2037	3	0
	2038	1	0
	2039	1	1
	2040	5	4
	2041	15	12
	2042	1	0
	2046	1	0
	2047	3	0
	2048	1	0
	2049	1	1
	2060	1	0
	2062	2	2
	2063	3	3
	2065	1	1
	2066	5	2
	2067	2	2
	2068	4	4
	2088	20	14
	2092	2	1
	2093	4	2
	2096	2	2
	2110	11	11
	2111	5	2
	2112	1	0
	2120	2	0

	2125	1	1
	2204	2	0
	2205	1	0
	2206	1	1
	2208	1	0
	2209	1	1
	2210	1	1
	2219	1	0
	2220	1	0
	2221	1	1
	2223	1	0
	2224	2	2
	2229	4	0
	2230	3	0
	2261	1	0
	2325	1	0
	2337	1	0
	2340	5	0
	2343	2	0
	2350	2	
	2397	1	0
	2398	1	0
	2400	2	0
	2406	1	0
	2450	1	0
	2477	1	0
	2481	2	0
	2528	1	0
	2534	1	0
	2537	1	0
	2541	1	0
	2580	1	0
	2582	1	0
	2583	2	0
	2586	2	0
	2590	2	0
	2594	1	0
	2607	1	0
	2630	1	0
	2632	1	0
	2644	1	0
	2650	5	0
	2652	2	0
	2666	2	0
	2669	2	0
	2675	1	0
	2680	2	0
	2711	3	0
	2721	1	0
	2722	1	0

	2756	1	0
	2794	1	0
	2820	1	0
	2821	2	0
	2824	1	0
	2825	3	0
	2827	1	0
	2829	1	0
	2830	1	0
	2831	1	0
	2832	1	0
	2840	2	0
	2842	1	0
	2870	1	0
	2927	1	0
	4573	2	0
CHN		7	0
HKG		3	0
ARE		1	0
PNG		2	0

ANNEXURE D: TRAVEL PROFORMA SURVEY EXAMPLE
(4 SHEETS)

Student Travel Mode Survey

Date: _____ Staff Member: _____ Year Group (K-12): _____

Instructions: Please record how students travelled to and will travel home from school today only.

Travel Mode	Travel TO School		Travel FROM School	
	Tally	Total	Tally	Total
Bus				
Train				
Family Car (as passenger)				
Friend Car (as passenger)				
Own Car as Driver				
With staff member (as passenger)				
Walking				
Bicycle				
Ferry				
Taxi/Uber				
Other: _____				
Other: _____				
Other: _____				

Instructions: Please record the postcodes of each student.

Postcode	Tally	Total
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		

Staff Travel Mode Survey

Summary of Questions

When did you start work today? _____

How did you arrive to work today?

- I drove in my own car
- I carpooled with another worker
- I was dropped-off by family, friends or similar?
- I used a ride share company (Uber, Taxi etc)
- I caught the Bus
- I caught the Train and then the Bus
- I walked
- I cycled
- Other – Please specify _____

When do you finish work today? _____

How will you leave work today?

- I drove in my own car
- I carpooled with another worker
- I was dropped-off by family, friends or similar?
- I used a ride share company (Uber, Taxi etc)
- I caught the Bus
- I caught the Train and then the Bus
- I walked
- I cycled
- Other – Please specify _____

If you drove to work, where did you park your car?

- On-site (in on-site staff parking)
- On-street, please specify which street _____

What is your post code? _____

Staff Travel Mode Survey

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

Date: _____

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?	What is your postcode?
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
…						

ANNEXURE E: TRAVEL ACCESS GUIDE
(16 SHEETS)

TRAVEL ACCESS GUIDE FOR KINCOPPAL-ROSE BAY SCHOOL AT CORNER OF NEW SOUTH HEAD ROAD &, VAUCLUSE RD, VAUCLUSE

Prepared for:

KINCOPPAL – ROSE BAY
SCHOOL OF THE SACRED HEART

Assessed and Approved by:

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

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

Division of RAMTRANS Australia ABN: 45067491678 RPEQ: 19457

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

220903.02DA - 12 January 2023

TRAVEL MODES FOR YOU

Kincoppal-Rose Bay School is located at Corner of New South Head Road &, Vaucluse Rd, Vaucluse. This Travel Access Guide outlines the various transport modes available to you when travelling to and from Kincoppal-Rose Bay School.

Kincoppal-Rose Bay School is well serviced by alternate transport modes connecting the school with the rest of Sydney. In many cases it may be faster and more convenient to travel to the school by alternate transportation than private vehicle.

Public Bus

Train

Ferry

School Bus

PLANNING AHEAD

To ensure that you arrive to Kincoppal-Rose Bay School on time, plan ahead using the following resources provided by **Transport for New South Wales** (TfNSW):

- **Trip Planner** accessed via https://transportnsw.info/
- **Opal Travel** – accessed via a downloadable application on your mobile device
- **TripView** – accessed via a downloadable application on your mobile device
- **City Mapper** – accessed via a downloadable application on your mobile device (https://citymapper.com/)

The above resources provide real-time service updates, detailed service information, walking and cycling distances and accessibility details.

USING ACTIVE TRANSPORT MODES FOR ALL OR SOME OF YOUR JOURNEY

Using active transport modes such as walking or cycling, for a part of your daily journey to and/or from school is a great way to improve and maintain your physical health along with your mental health. It can provide some well needed ‘me-time’ in your day.

PUBLIC TRANSPORT – OPAL FARES

The use of an OPAL card ensures the most efficient way to use public transport. A summary OPAL fares for available transport modes for children and adults are provided below:

- Adult OPAL fares:
    - Adult fares are capped to **$16.80** a day or **$50** a week
    - A discount of 30% fare discount incurs when using public transport outside of the peak times
- Child OPAL fares:
    - Child fares are capped to **$8.40** a day or **$25** a week
    - A discount of 30% fare discount incurs when using public transport outside of the peak times

For more information regarding OPAL fares please visit the OPAL fares and payments website.

GETTING TO KINCOPPAL-ROSE BAY SCHOOL

PUBLIC BUS SERVICES

Kincoppal-Rose Bay School is well connected through many public bus services that provides connection to the Edgecliff Train Station.

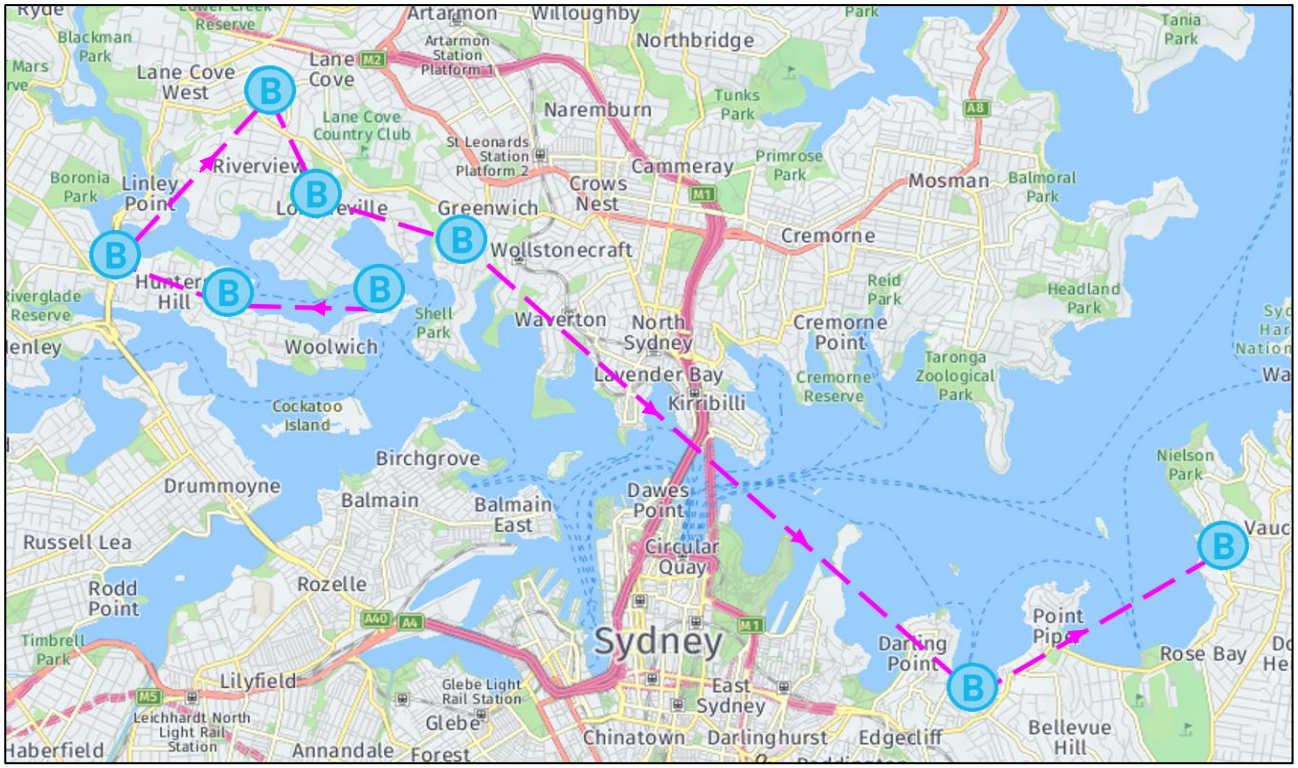
PUBLIC BUS SERVICES

Route	Destination	Frequency		
		Off-Peak[(1)]	8 – 9 AM	3 – 4 PM
324	Watsons Bay to Walsh Bay via Old South Head Road	30 min	12 min	15 min
324X	Vaucluse to City Wynyard (Express Service)	-	30 min	-
325	Watsons Bay to Walsh Bay via Vaucluse Road	30 min	30 min	30 min
386	Vaucluse to Bondi Junction via New South Head Road & Old South Head Road	30 min	30 min	20 min

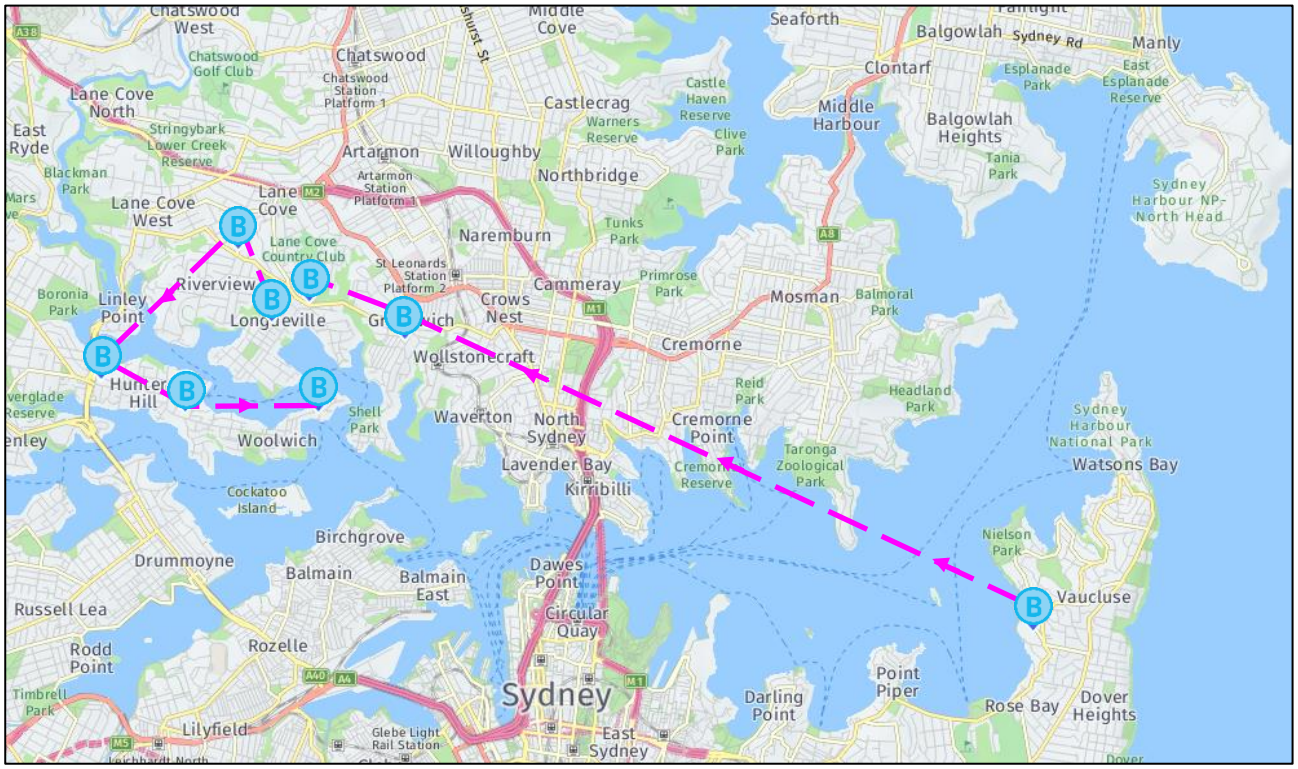
KINCOPPAL-ROSE BAY STUDENT BUS SCHEDULE

HUNTERS HILL / LANE COVE / GREENWICH / KRB – RETURN SERVICE

Morning Service	Afternoon Service
7:05am – Valencia Street, Hunters Hill (Bus stop near Woolwich Wharf). 7:10am – Woolwich Road, Hunters Hill (Bus stop near Wybalena Road) 7:15am – Durham Street, Hunters Hill (Near Church Street) 7:20am – River Road West, Riverview (Bus stop near corner of Fox Street) 7:30am – Kenneth Street, Longueville (Cnr Francis) 7.35am – Greenwich Rd, Greenwich (Corner Evelyn St) 8.00am – New South Head Rd, Double Bay (Bus stop near Knox St) (Only if required) 8.15am – KRB	3.20pm – Depart KRB 3.45pm – Greenwich Rd, Greenwich (Corner Oscar St) 3.50pm – Northwood Rd, Longueville, (Bus stop near Fleming St) 3.52pm – Arabella St, Longueville (Outside No 38) 3.55pm – Christina St, Longueville (Cnr Kenneth St) 4.03pm – River Rd West, Riverview (Bus stop near Tambourine Bay Rd.) 4.10pm – Exit ramp Hunters Hill (Before Church St) 4.15pm – Woolwich Rd, Hunters Hill (Bus stop near Wybalena Rd) 4.20pm – Valentia St, Hunters Hill (Bus stop near Woolwich Wharf)



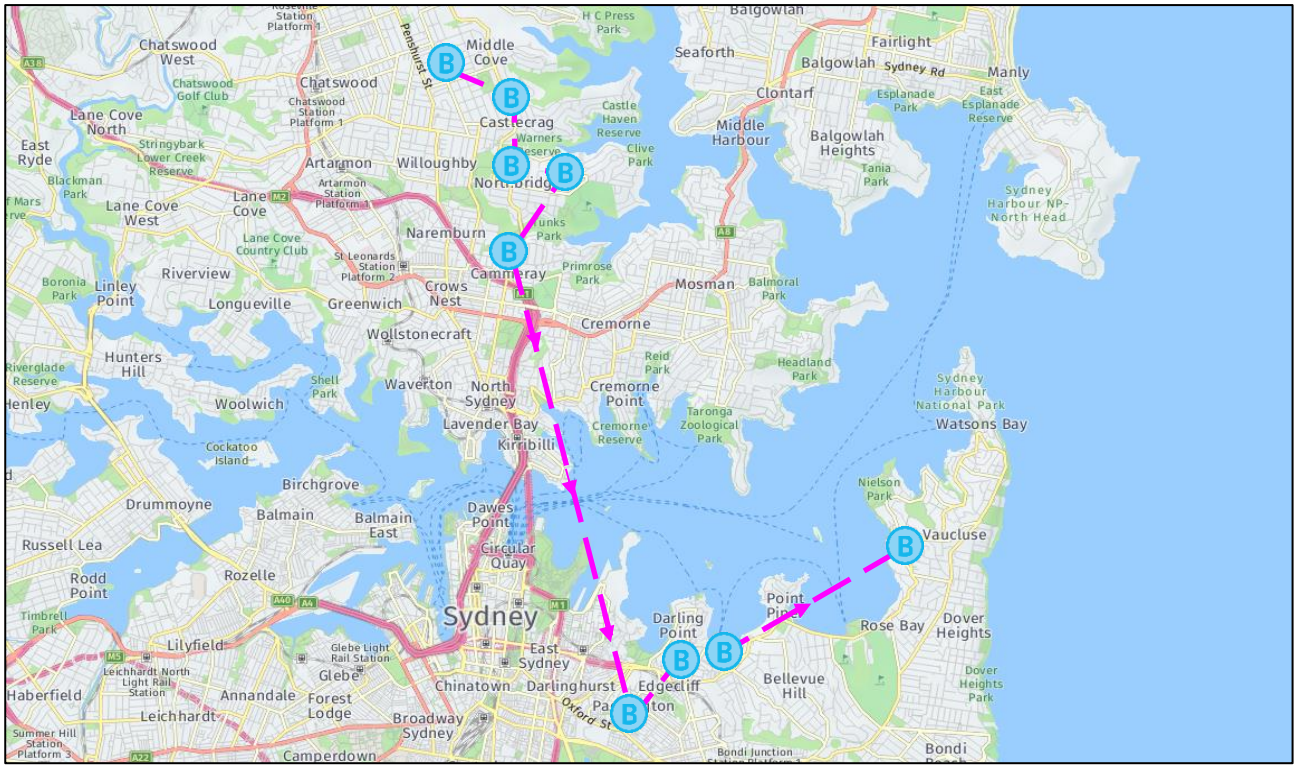
MORNING SERVICE INDICATIVE BUS MAP



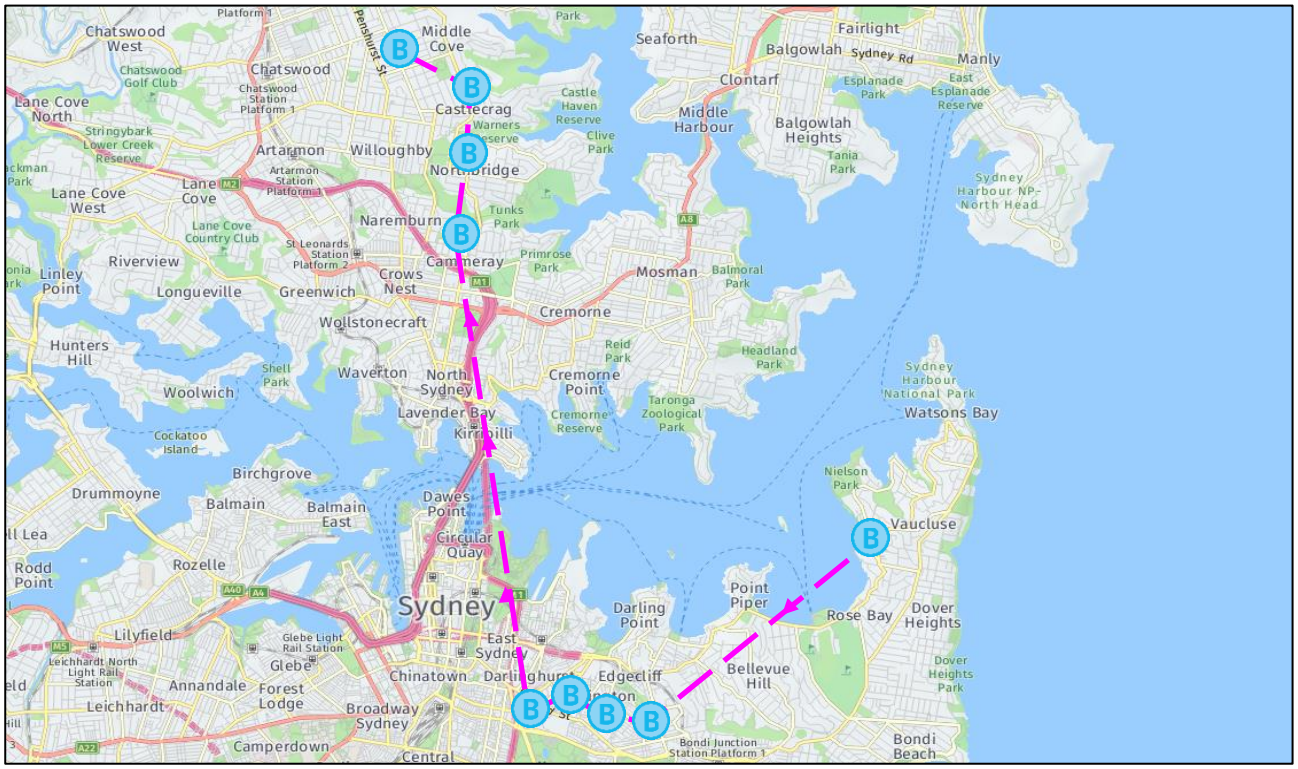
AFTERNOON SERVICE INDICATIVE BUS MAP

WILLOUGHBY / NORTHBRIDGE / CAMMERAY / PADDINGTON / KRB – RETURN SERVICE

Morning Service	Afternoon Service
7.20am – High St, Willoughby (Near St Thomas' Church) 7.25am – Eastern Valley Way, Castlecrag (Bus stop before lights near Edinburgh Rd) 7.30am – Sailors Bay Rd, Northbridge (Bus stop after roundabout at Strathallan Ave) 7.32am – Sailors Bay Rd, Northbridge (Bus stop after roundabout at Woonona, southern side of road) 7.40am – Amherst St, Cammeray (Bus stop near corner of Miller St, on Eastern side) 7.55am – Oxford St & William St, Woollahra 8.00am – Ocean St, Woollahra (Opp. Chiswick Restaurant) 8.05am – Stand M – Edgecliff Centre Bus Interchange 8.00am – New South Head Rd, Double Bay (Bus stop near Knox St) 8.15am – KRB	3.20pm – Depart KRB 3.40pm – Ocean St, Woollahra (Bus stop before Wellington St) 3.45pm – Queen St, Woollahra (Bus stop cnr Dornhauer Lane) 3.50pm – Oxford St, Paddington (Bus stop before Paddington Public School) 3.52pm – Oxford St, Paddington (Bus stop before Oatley Rd) 3.55pm – Moore Park Rd, Moore Park (Pedestrian crossing near Greens Rd) 3.50pm – Miller St, Cammeray (Outside Cammeray shops) 3.55pm – Strathallan Ave, Northbridge (Stop before cnr of Sailors Bay Rd) 4.05pm – Eastern Valley Way, Castlecrag (Over Edinburgh Rd lights) 4.10pm – High St, Willoughby (Near St Thomas' Church)



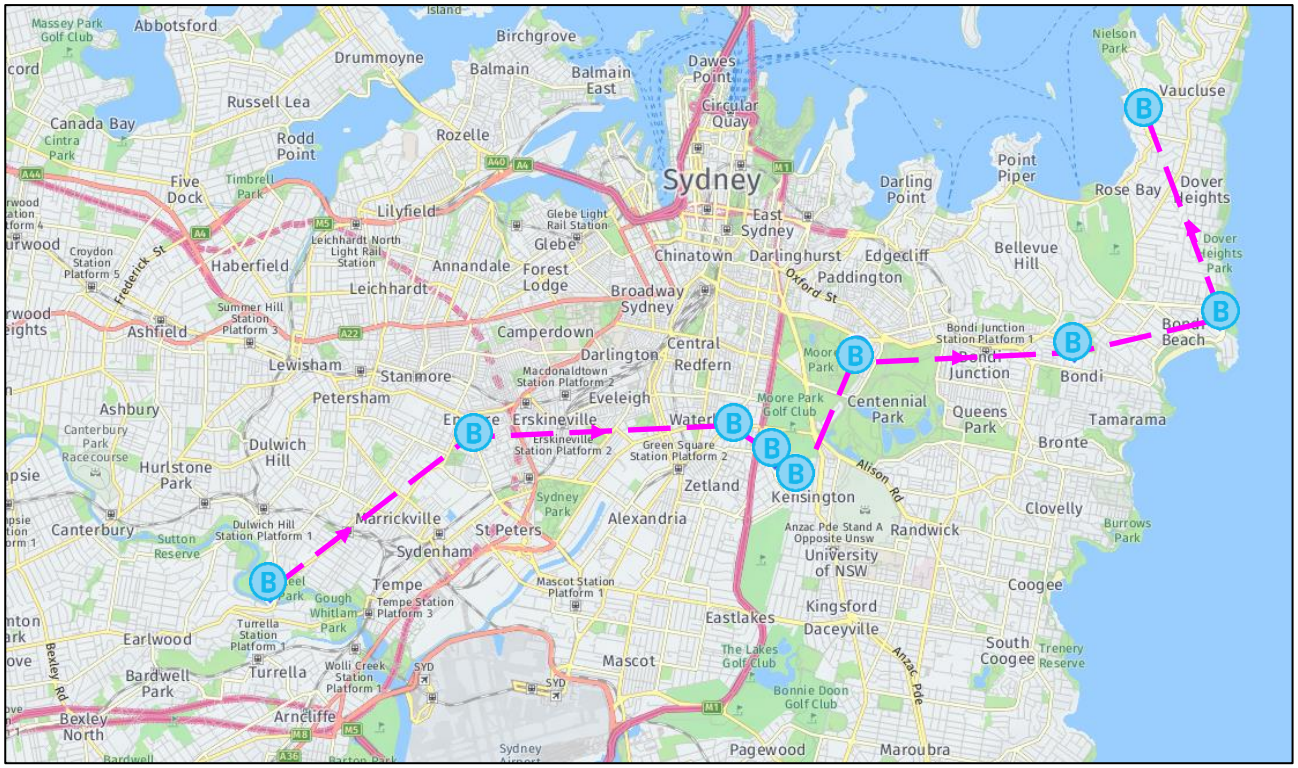
MORNING SERVICE INDICATIVE MAP



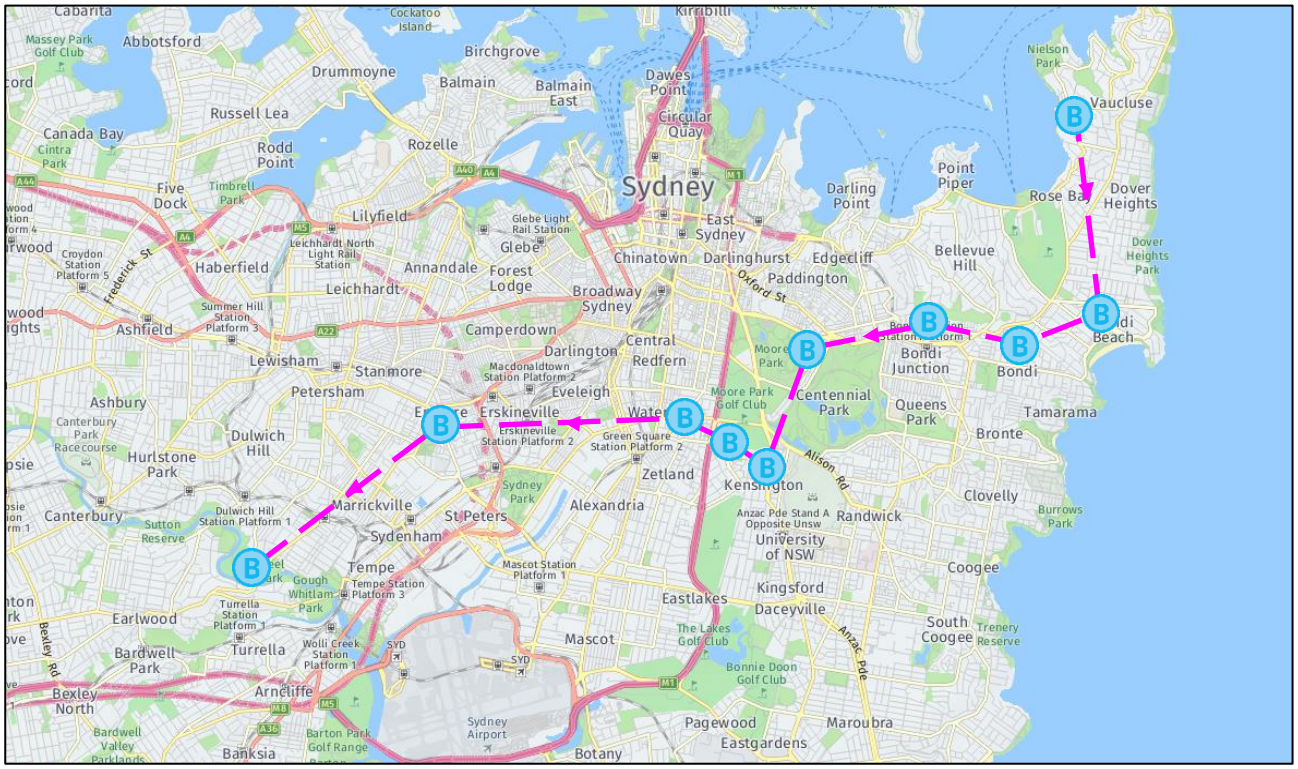
AFTERNOON SERVICE INDICATIVE BUS MAP

EARLWOOD / MARRICKVILLE / PADDINGTON / WOOLLAHRA / BONDI / KRB – RETURN SERVICE

Morning Service	Afternoon Service
7.00am Homer St, Earlwood (Bus stop outside No. 27) 7.10am Llewellyn St, Marrickville (Near corner of Juliett St) 7.22am O'Dea Ave, Zetland (Bus stop near Sam Sing St) 7.26am Todman Ave, Kensington (Bus stop before Baker St) 7.30am Todman Ave, Kensington (Bus stop corner Balfour Rd) 7.40am Cook Rd, Centennial Pk (Bus stop before Darvall St) 7.52am Bondi Rd, Bondi (Bus stop after Penkivil St) 7.56am Campbell Pde Nth Bondi (Cnr Roscoe St Mall) 8.00am Campbell Pde, North Bondi (Bus zone after Brighton Boulevard) 8.15am KRB)	3.20pm Depart KRB 3.35pm Nth Bondi (Bus Terminus) 3.36pm Campbell Pde, Bondi (Just before Curlewis St) 3.40pm Bondi Rd, Bondi (Bus stop near Watson St just before fruit shop) 3.55pm Cook Rd, Centennial Park (Bus stop after Darvall St) 4.05pm Todman Ave Kensington (Bus stop cnr Anzac Pde) 4.07pm Todman Ave, Kensington (Bus stop before Balfour Rd) 4.10pm Todman Ave, Kensington (Bus stop cnr Baker St) 4.15pm O'Dea Ave, Zetland (Bus stop near Sam Sing St) 4.30pm Llewellyn St, Marrickville (Near Juliett St) 4.40pm Homer St, Earlwood (Near Undercliffe Rd)



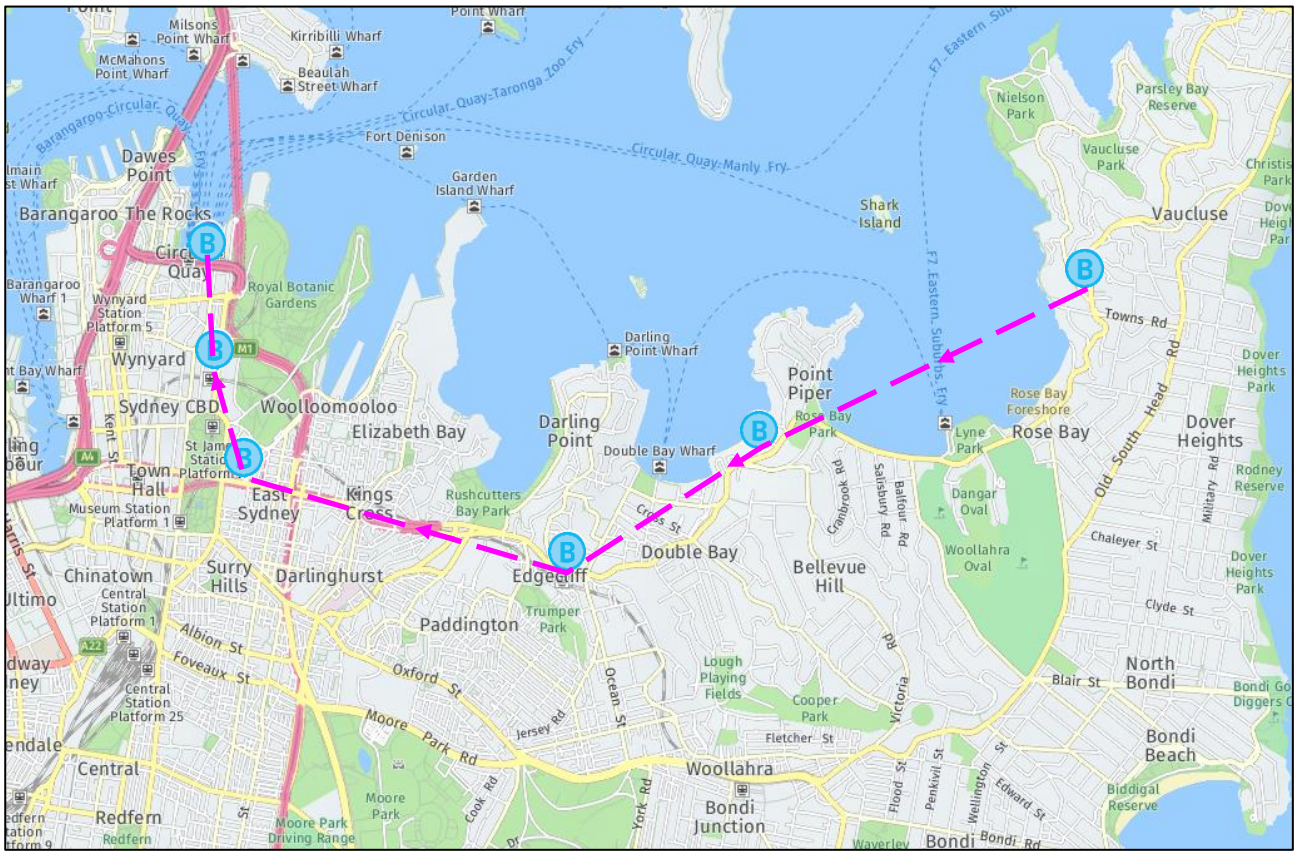
MORNING SERVICE INDICATIVE BUS MAP



AFTERNOON SERVICE INDICATIVE BUS MAP

EDGECLIFF STATION / WILLIAM ST / MACQUARIE STREET / CIRCULAR QUAY

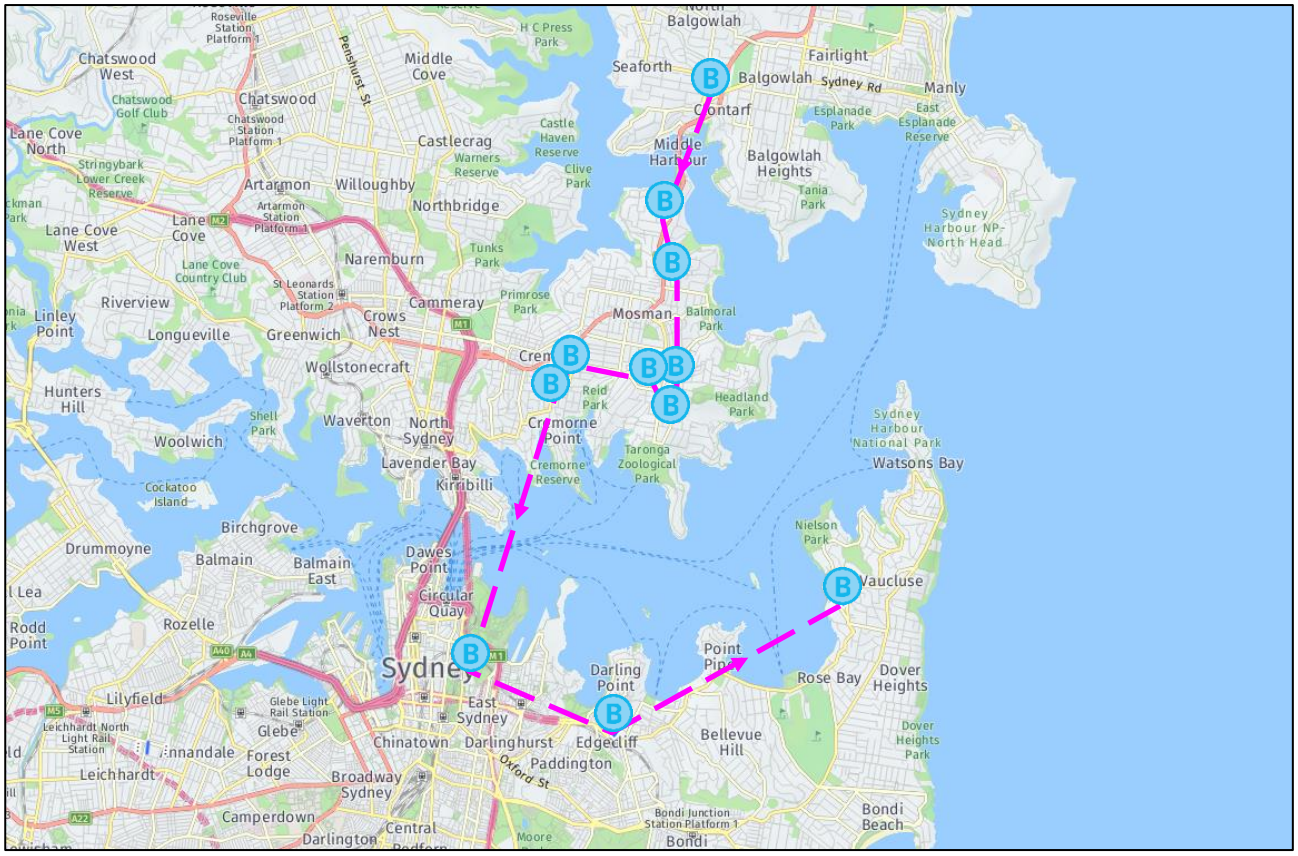
5.15pm Service
A late service operates from KRB on Monday, Tuesday, Wednesday, and Thursday. This service does NOT operate on Fridays. 5.25pm New South Head Rd, Edgecliff (Bus zone outside the Edgecliff Centre) 5.35pm William St, Sydney (Bus zone near Yurong St) 5.40pm Macquarie St, Sydney (Bus zone near Martin Place) 5.45pm Phillip St, Sydney (Bottom of Phillip St, at the forecourt of Circular Quay) Please note that the bus leaves at 5.15pm sharp!



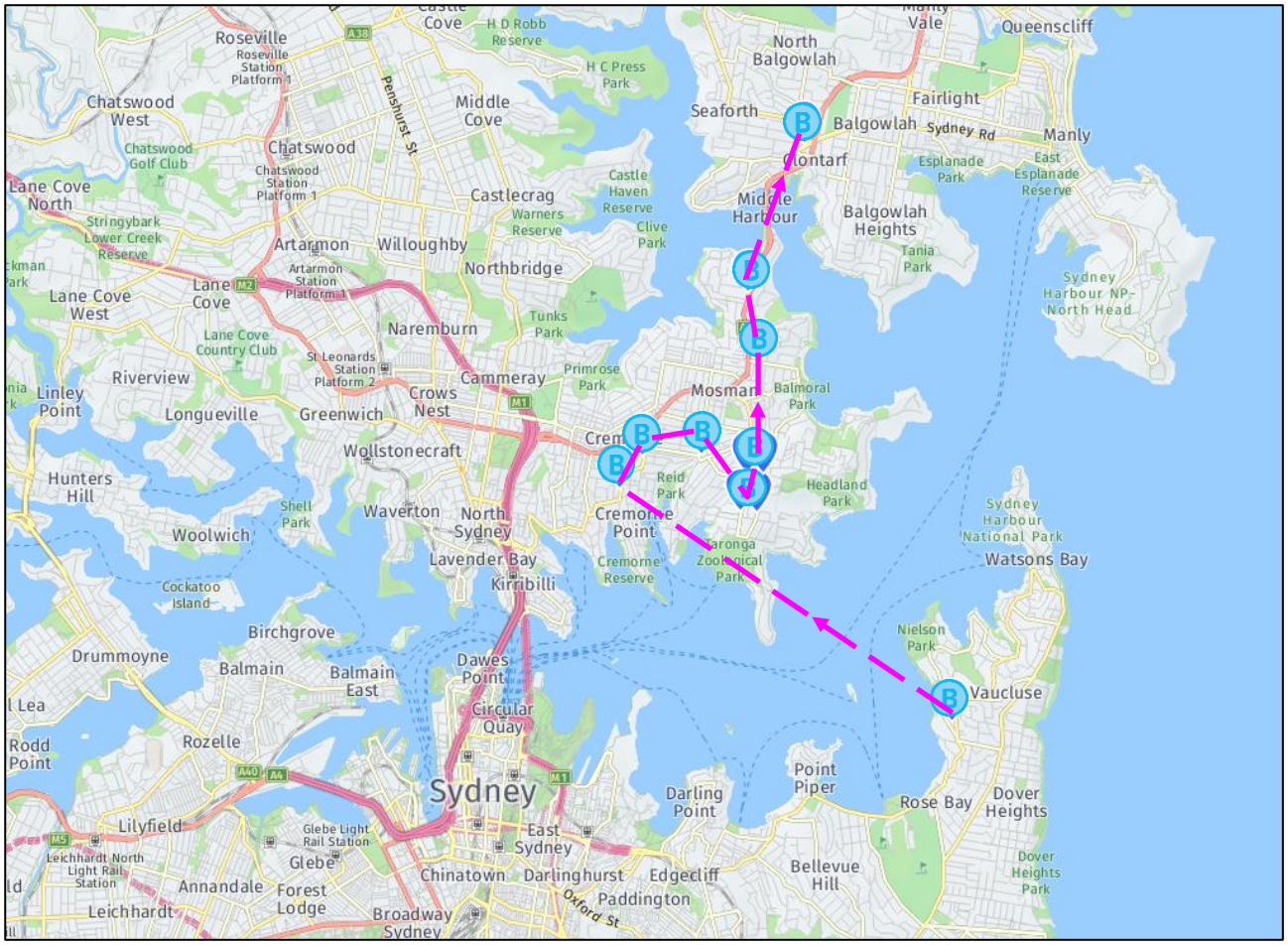
AFTERNOON SERVICE INDICATIVE BUS MAP

SEAFORTH / BALMORAL / MOSMAN / CREMORNE / NEUTRAL BAY / KRB – RETURN SERVICE

Morning Service	Afternoon Service
7.05am: Seaforth, Sydney Rd, (Bus stop outside Taste of Belgium) (Southern Kerb) 7.10am Spit Rd, Beauty Point (Bus stop near Medusa St) 7.13am: Moruben Rd, Mosman (Bus stop before roundabout) (Eastern Kerb) 7.19am Bradleys Head Rd Mosman (Bus stop Cnr King Max St) (Eastern Kerb) 7.20am Bradleys Head Rd (Bus stop near Thompson St) 7.21am Prince Albert St, Mosman (Bus stop near Lennox St) 7.22am Queen St Mosman (Outside Queenwood Tennis Court) (Southern Kerb) 7.25am: Spofforth St Cremorne (Bus stop near Brierley St) (Eastern Kerb) 7.28am Murdoch St, Cremorne (Bus stop prior to Bannerman Rd) (Eastern Kerb) 7.40am St Mary's Cathedral (Funeral vehicles zone) 7.50am Bus Interchange above Edgecliff Centre (Stand M) 8.05am KRB	3.20pm Depart KRB 3.50pm Murdoch St, Cremorne (Bus stop near Bannerman Rd) (Western Kerb) 3.55pm Spofforth St Cremorne (Bus stop near Brierley St) (Western Kerb) 4.00pm Avenue Rd Mosman (Bus stop outside BP service station) (Northern Kerb) 4.02pm Prince Albert St, Mosman (Near Queen St) (Eastern Kerb) 4.03pm Prince Albert St, Mosman (Near Thompson St) (Eastern Kerb) 4.05pm Bradleys Head Rd, (Bus stop near Thompson St) 4.08pm King Max St Mosman (Near Bradleys Head Rd) (Western Kerb) 4.10pm Moruben Rd, Mosman (Bus stop near Awaba St) (Western Kerb) 4.15pm Spit Rd, Beauty Point (Bus stop outside Beauty Point Catholic Church) 4.20pm Seaforth, Sydney Rd (Bus stop outside Taste of Belgium) (Southern Kerb)

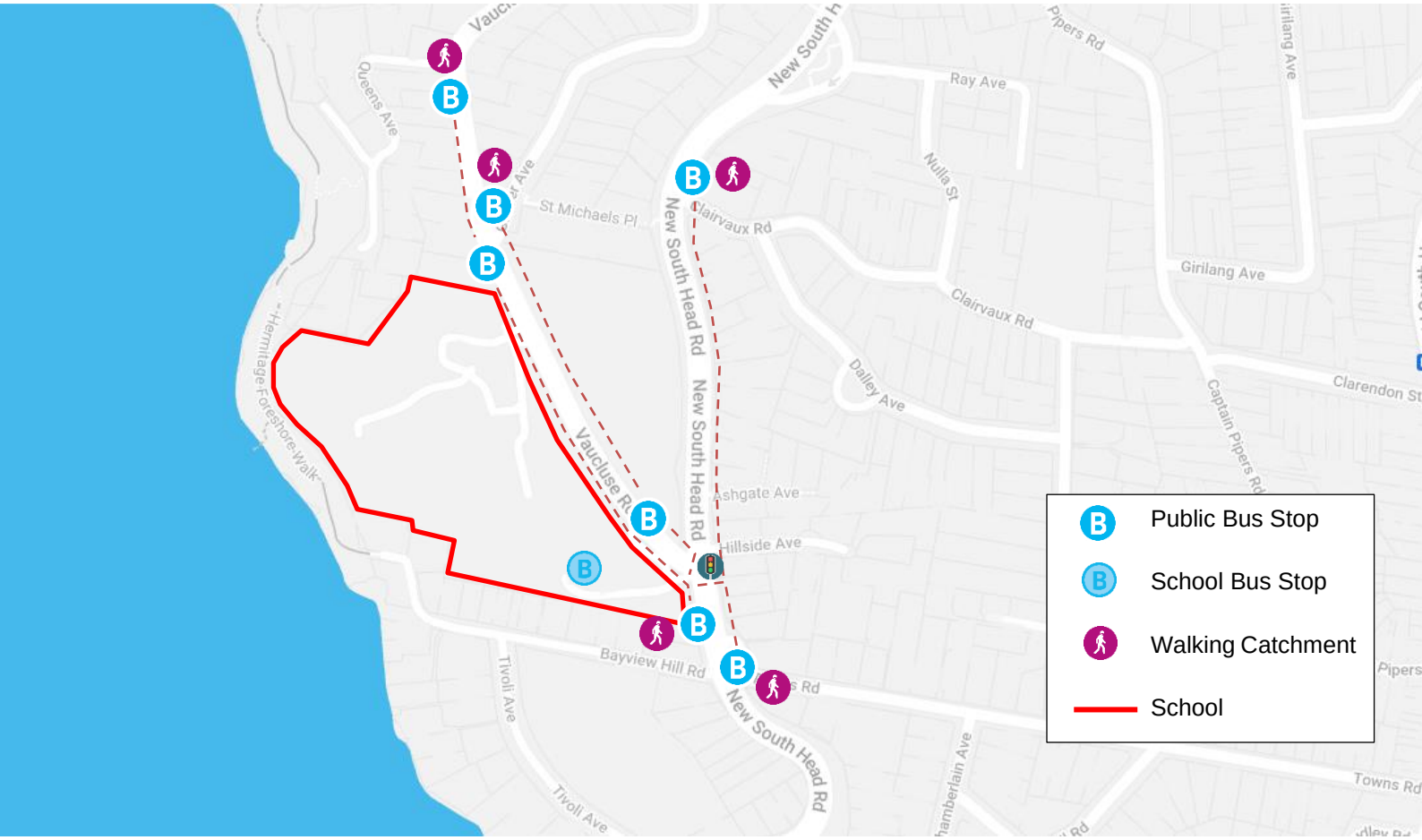


MORNING SERVICE INDICATIVE BUS MAP



AFTERNOON SERVICE INDICATIVE BUS MAP

ALTERNATE TRANSPORT



As shown above, the school is well serviced by bus stops both private and public in nature.

TRAIN FACILITIES

The bus services provide connection between Kincoppal-Rose Bay School and Edgecliff Train Station. Edgecliff Train Station Services the following train lines:

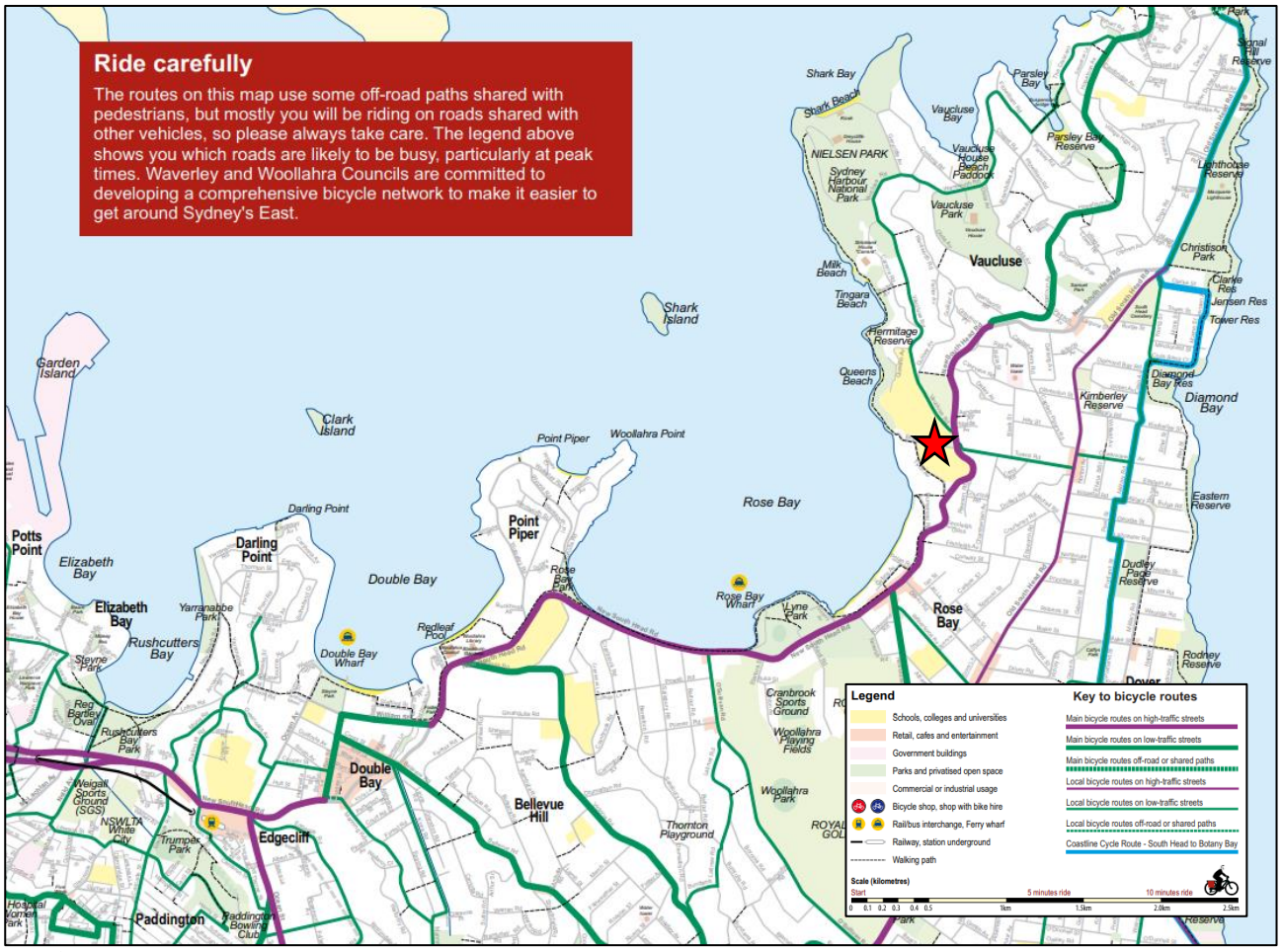
- T4 – Eastern Suburbs & Illawarra Line
    - Providing a connection between Helensburgh and Bondi Junction
- SCO – South Coast Line
    - Providing a connection between Kiama and Bondi Junction

CYCLING FACILITIES

Woollahra Municipal Council's *Cycling in Waverly & Woollahra* map offers cycling routes within close proximity of the school. Using these marked cycle routes can give you confidence when travelling to and/or from school using a bicycle.

Cyclists can travel north or south utilising Vaucluse Road and east or west using Towns Road which are marked as "main bicycle routes on low-traffic streets". It should be noted that New South Head Road is a high volume road, hilly and without shoulder area which does not make an ideal bike route during peak hours.

An extract from [Woollahra Municipal Council's – Cycling in Waverly & Woollahra] is shown below.



BUILDING ACCESS AND FACILITIES

End of trip facilities including change rooms and showers are available within the MTC Building on the eastern side of Vaucluse Road for staff and students.

Bike storage racks are located within the senior school campus.

End of trip facilities include:

- 18 bike racks.
- Male and female change rooms including showers.